

PROVINCE OF BRITISH COLUMBIA
MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

SAND AND GRAVEL PERMIT
APPROVING WORK SYSTEM AND RECLAMATION PROGRAM
(Issued pursuant to Section 10 of the *Mines Act* R.S.B.C. 1996, C.293)

Permit: **G-8-330**

Mine No.: **1610443**
Approval No.: **17-1610443-1012**

Issued to: **Mid Island Aggregate (2013) Ltd.**
823 Kangaroo Road
Victoria BC V9C 4E2

for work located at the following property:

Mid Island Aggregates 2013 Ltd

This approval and permit is subject to the appended conditions.

Issued this 26th day of January in the year 2009.

Amended this 21st day of May in the year 2014. (to include 0.95 ha)

Amended this 9th day of June in the year 2015. (name change amendment)

Amended this 12th day of October in the year 2017.



Jim Dunkley, P.Geo.
Inspector of Mines

PREAMBLE

Notice of intention to commence work on a sand and gravel pit, including a plan of the proposed work system and a program for the protection and reclamation of the surface of the land and watercourses affected by the Notice of Work dated Tuesday, June 14, 2016 was filed with the Inspector of Mines on Tuesday, June 14, 2016. Notice of such filing was waived.

This permit contains the requirements of the Ministry of Energy, Mines and Petroleum Resources for reclamation. It is also compatible, to the extent possible, with the requirements of other provincial ministries for reclamation issues. The amount of security required by this permit, and the manner in which this security may be applied, will also reflect the requirements of those ministries. Nothing in this permit, however, limits the authority of other provincial ministries to set other conditions, or to act independently, under their respective permits and legislation.

Decisions made by staff of the Ministry of Energy, Mines and Petroleum Resources will be made in consultation with other ministries.

CONDITIONS

The Chief Inspector of Mines (Chief Inspector) hereby approves the work plan and the program for protection and reclamation of the land surface and watercourses subject to compliance with the following conditions:

1. Reclamation Security

- (a) The owner, agent or manager (herein called the Permittee) shall maintain with the Minister of Finance securities in the amount of sixty thousand dollars (\$60,000). The security will be held by the Minister of Finance for the proper performance of the approved program and all the conditions of this permit in a manner satisfactory to the Chief Inspector.
- (b) The Permittee shall conform to all forest tenure requirements of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development. Should the Permittee not conform to these requirements then all or part of the security may be used to cover the costs of these requirements.
- (c) The Permittee shall conform to all Ministry of Environment and Climate Change Strategy approval, licence and permit conditions, as well as requirements under the **Wildlife Act**. Should the Permittee not conform

to these conditions, then all or part of the security may be used to fulfill these requirements.

2. Land Use

The surface of the land and watercourses shall be reclaimed to the following land use: **Forestry**

3. Productivity

The level of land productivity to be achieved on reclaimed areas shall not be less than existed prior to mining on an average property basis unless the Permittee can provide evidence which demonstrates, to the satisfaction of the Chief Inspector, the impracticality of doing so.

4. Revegetation

Land shall be re-vegetated to a self-sustaining state using appropriate plant species.

5. Use of Suitable Growth Medium

(a) On all lands to be revegetated, the growth medium shall satisfy land use, productivity, and water quality objectives. Topsoil and overburden (to rooting depth) shall be removed from operational areas prior to any disturbance of the land and stockpiled separately on the property for use in reclamation programs, unless the Permittee can provide evidence which demonstrates, to the satisfaction of the Chief Inspector, that reclamation objectives can otherwise be achieved.

(b) No topsoil shall be removed from the property without the specific written permission of the Inspector of Mines.

6. Buffer Zones and Berms

Buffer zones and/or berms shall be established between the mine and the property boundary unless exempted in writing by the Inspector of Mines.

7. Treatment of Structures and Equipment

Prior to abandonment, and unless the Chief Inspector has made a ruling otherwise, such as heritage project consideration or industrial use,

- (a) all machinery, equipment and building superstructures shall be removed,
- (b) concrete foundations shall be covered and revegetated unless, because of demonstrated impracticality, they have been exempted by the Inspector, and
- (c) all scrap material shall be disposed of in a manner acceptable to the Inspector.

8. Watercourses

- (a) Watercourses shall be reclaimed to a condition that ensures
 - (1) long-term water quality is maintained to a standard acceptable to the Chief Inspector,
 - (2) drainage is restored either to original watercourses or to new watercourses which will sustain themselves without maintenance, and
 - (3) use and productivity objectives are achieved and the level of productivity shall not be less than existed prior to mining unless the Permittee can provide evidence which demonstrates, to the satisfaction of the Chief Inspector, the impracticality of doing so.
- (b) Water which flows from disturbed areas shall be collected and diverted into settling ponds.

9. Roads

- (a) All roads shall be reclaimed in accordance with land use objectives unless permanent access is required to be maintained.

- (b) Individual roads will be exempted from the requirement for total reclamation under condition 9(a) if either:
 - (1) the Permittee can demonstrate that an agency of the Crown has explicitly accepted responsibility for the operation, maintenance and ultimate deactivation and abandonment of the road, or
 - (2) the Permittee can demonstrate that another private party has explicitly agreed to accept responsibility for the operation, maintenance and ultimate deactivation and abandonment of the road and has, in this regard, agreed to comply with all the terms and conditions, including bonding provisions, of this reclamation permit, and to comply with all other relevant provincial government (and federal government) regulatory requirements.

10. Disposal of Fuels and Toxic Chemicals

Fuels, chemicals or reagents which cannot be returned to the manufacturer/supplier are to be disposed of as directed by the Chief Inspector in compliance with municipal, regional, provincial and federal statutes.

11. Fuels and Lubricants

Fuels and Lubricants, if stored on the mine site, shall conform to the requirements of the Ministry of Environment and Climate Change Strategy **Field Guide to Fuel Handling, Transportation, and Storage**.

The Permittee shall develop and implement a hydrocarbon management plan that deals with fueling, operational servicing, spill prevention and clean-up for fuels and lubricants stored on the mine site. The plan shall account for the following:

- (a) Fuel and lubricants shall be delivered to site as needed to re-supply fuel and oil tanks on mobile and fixed equipment.
- (b) Impermeable, oil absorbent matting shall be used when refueling and servicing equipment.
- (c) While refueling the operator shall be in control of the refueling nozzle at all times.

- (d) If any Petroleum, hydrocarbon or other product (no matter how small) is spilled the contaminated soil/gravels shall be forthwith collected and removed for appropriate disposal.
- (e) Fuel or oil leaks on equipment shall be effectively repaired as soon as they are discovered or the equipment shall be removed from the site and not operated until repairs have been made.
- (f) An emergency spill containment and clean up kit shall be maintained at the site while it is in operation. The kit shall have the capacity to contain and clean up 100% of a spill from a failure of the largest volume of a fuel or lubricant tank or system plus 10%.

12. Archaeological Find

An Archaeological Chance Find Procedure (ACFP) for this site shall be developed within 3 months of the date of this permit:

- (a) A copy of the procedure shall be posted at the Mine Site, and all workmen shall be trained in the implementation of this procedure.
- (b) A copy of this procedure shall be filed with the Inspector.

In the event that an archaeological site is encountered during the course of the approved mining activities, the program shall be suspended or modified in such a manner so as to ensure that the site is not damaged, desecrated or otherwise altered and the occurrence shall be reported immediately to the Archaeological Branch of the Ministry Forests, Lands, Natural Resource Operations and Rural Development and, the Ministry of Energy, Mines and Petroleum Resources (Inspector of Mines). Work shall not be resumed until authorized by the joint Ministries.

13. Site Access

The Mine Manager, or in their absence a Designate, shall allow Employees of other Provincial Ministries holding authorizations related to Compliance and Enforcement duties onto the mine site subject to the following conditions:

- (a) the Provincial Employee must present the appropriate Ministry identification; and
- (b) must clearly state that they are acting on behalf of an Inspector of Mines;

- (c) they must be given a site orientation as required by the Health & Safety, and Reclamation Code;
- (d) they must sign-in and sign-out as acknowledgement of being on site;
- (e) they must be accompanied at all times by the Mine Manager, or qualified person appointed by the Manager, and shall take all necessary measures to ensure the safety and well being of the individual(s); and this condition is not applicable to other Provincial Legislation.

14. Site Stability

- (a) The inspector shall be advised in writing at the earliest opportunity of any unforeseen conditions that could adversely affect the extraction of materials, site stability, erosion control or the reclamation of the site.
- (b) The stability of the slopes shall be maintained at all times and erosion shall be controlled at all times.
- (c) The discovery of any significant subsurface flows of water, seeps, substantial amounts of fine textured, soils, silts and clays, as well as significant adverse geological conditions shall be reported to the inspector as soon as possible and work shall cease until the inspector advises otherwise.

15. Site Security

All site access shall be secured with locking gates and signage provided indicating the mine name, operator's name and emergency contact number as well as all necessary safety advisories. Gates shall be locked when the quarry is not in operation.

16. Temporary Shutdown

If this sand and gravel pit ceases operation for a period longer than one year the Permittee shall either continue to carry out the conditions of the permit or apply for an amendment setting out a revised program for approval by the Chief Inspector.

17. Safety Provisions

All safety and other provisions of the **Mines Act** shall be complied with to the satisfaction of the Chief Inspector.

18. Monitoring

The Permittee shall undertake monitoring programs, as required by the Inspector of Mines, to demonstrate that reclamation objectives are being achieved.

19. Alterations to the Program

Substantial changes to the program must be submitted to the Inspector of Mines for approval.

20. Notice of Closure

Pursuant to Part 10.6.1 of the Health, Safety and Reclamation Code for Mines in British Columbia, a Notice of Completion of Work shall be filed with the Inspector of Mines not less than seven days prior to cessation of work.

21. Annual Report

Annual reports shall be submitted in a form and containing the information as and if required by the Inspector of Mines.

SITE SPECIFIC CONDITIONS:

1. Annual production shall not exceed 240,000 tonnes per year.
2. This permit authorizes blasting, crushing and screening, stockpiling and load-out operations only. No washing or other operations are authorized.
3. Operating hours shall be 07:00 to 17:00 Monday through Friday. Light maintenance work is permitted Saturdays 09:00 to 16:00. *Light Maintenance is defined as:* work requiring only the use of hand tools. It does not include air impact tools, air arcing, or any heavy equipment to perform a task.

4. Notwithstanding the hours of work provisions of Permit # G-8-330, the permittee is authorized to conduct work outside of these provision should:
 - (a) An agency having jurisdiction declare an emergency and the product from this site is required to mitigate an emergency.
 - (b) A safety concern on site is such that a failure to complete necessary work can result in harm or risk to workers, or members of the public.
 - (c) If an environmental incident on site has occurred and a failure to address or mitigate the incident can result in harm to the receiving environment.
5. All mine contact water shall be collected and directed to settling ponds. All surface water discharges from settling ponds shall have no more than 25mg/l Total Suspended Solids (TSS) above background levels at the time of sampling.
6. No surface water shall be directed to the creek on the western boundary of the mine site.
7. No material shall be imported onto the mine site, whether for reclamation or any other purpose, without the prior written permission of the Inspector.
8. All current stockpiles of concrete and asphalt shall be removed from the site by April 30, 2018. Failure to remove these materials by this date may result in the suspension of all mining-related activities until such time as this condition has been met.
9. No non-mining related activities are to take place on the mine site without the written permission of the Inspector.
10. **Blasting conditions:**
 - (a) To the extent practical, all blasts initiated on the quarry shall be videoed and,
 - i. a copy of the video shall be kept at the mine office,
 - ii. made available to an inspector on request.
 - iii. Video; shall be kept for a period of 1 year.
 - (b) The video file shall include the following identification information:
 - i. the pit name, and mine number
 - ii. the bench/location identification, including a map showing the location on the mine footprint.
 - iii. the name of the blaster
 - iv. the date of the blast
 - v. the time of the blast

- vi. other information and records as may be required as conditions of the permit, or directives of an inspector.
- (c) The video shall clearly show the conduct of the blast in sequence of events including;
 - i. the free faces prior to the blast, with emphasis placed on the face profile, and the rock structure
 - ii. the layout of the blast pattern, including the tie ins
 - iii. the overall site layout of the area within the “danger zone.”