

Proposal for Urban Mining Guideline **Zones**
For the Central Okanagan

Version 1.9

August 20, 2007

“A mine plan should be flexible, technically competent, business smart and respectful of the community and the environment.” Aggregate Operators BMP Handbook for B.C.,2002, pg. 30.

The lack of appropriate regulation and lack of municipal input into the approval process for aggregate mining has resulted in escalating conflict between the aggregate industry and impacted Okanagan residential neighborhoods. Far from the cliché charge of NIMBY-ism, these neighborhoods are not adequately protected by B.C.’s antiquated 1872 Mines Act and Bill 54 (2002)^{24,25,26}. The B.C. Mines act allows developers to sidestep the environmental/development bylaws that direct land development in the Central Okanagan.

The coalition of Okanagan groups against urban mining in residential areas generated this proposal in answer to requests from the Honorable MLA’s, Rick Thorpe and Al Horning. These zones are based on a review of the Fraser Valley Aggregate Pilot Project, RDCO Aggregate Supply and Demand Study, Aggregate Operators BMP Handbook for B.C., B.C. Mines Act, gravel pit regulation in North American jurisdictions, lawsuit outcomes and haul route criteria.¹⁻²²

We would further propose that:

- **gravel reserves be established to conserve this valuable resource in otherwise undeveloped areas.**
- An appropriate portion of the profits (e.g. \$0.06 – 0.07/ton^{1,14,15}) be set aside for staged, sustainable reclamation/remediation in payments to regional governments in addition to a bond large enough to discourage “walking out” on a failed pit
- Gravel pit operators with good environmental/community track records receive expedited treatment on future applications

Thanks,

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Peachland

John Templeton
Oyama

Grant Lawrence
Carr’s Landing

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For the Yellow and Green Zones, the permit decision process needs to be jointly approved by Ministry of Mines and the local municipal authority.

Mine Inspectors and regional inspectors should monitor and publicly report mining and/or reclamation progress on a minimum of an annual basis or as triggered by complaints.

Proposed Urban Mining Zones for the Central Okanagan

Red Zone – Environmental or residential protection zone – no mining if:

- the proposed pit or processing area is within 500 m of the nearest residence OR
- sections of the proposed pit/processing area or haul route have been identified as Environmentally Sensitive Area ESA 1¹⁰ or parkland or ecological reserve^{2,5,7} OR
- the proposed pit area is in a groundwater recharge zone/groundwater protection zone^{10,20} OR
- a significant, documented health risk is posed by: dust, compromised water supply, contaminants, trucking hazards or noise disturbance²³ OR
- the proposed pit footprint is in the ALR and would reduce agricultural potential OR
- the viewscape is permanently damaged by pit or stockpiles or can be viewed from an urban center or Okanagan mainstem lake (Okanagan, Kalamalka, Wood, Duck) OR
- haul route is unsuitable (type C low volume roads or less)⁴

Yellow Zone – Mining possible with significant restrictions if

- exploration of the mining site is subject to the same standards, including reclamation, as an active pit.
- the proposed pit/ is within 1000 m of the nearest residence
- the proposed pit/processing area or haul route has been identified as ESA2¹⁰
- the proposed pit area is within 30m^{8,10,13,20} of surface or groundwater features
- storm water from the disturbed area and haul route can be managed by infrastructure^{18,23}
- health risk posed by: dust, storm water drainage, contaminants, trucking hazards or noise disturbance can be managed through restrictions and infrastructure^{20,23}
- impact to the viewscape from the pit or stockpiles is minimal or the impact can be remediated according to a staged, sustainable plan
- the haul route will bear limited hauling (type B medium volume roads)⁴ and be <10% grade and conform to Health Safety and Reclamation Code section 6-8 specifications¹⁹
- no screening, crushing, or cement plant is possible without industrial zoning
- Extension of the mining permit by more than 3-4 months or expansion of the disturbed area by more than 35%²¹ (cumulative during the life of the pit permit) would trigger a re-application with public input. This includes existing aggregate extraction permits^{17,18}

Green Zone – Responsible mining is acceptable if

- exploration of the mining site is subject to the same standards, including reclamation, as an active pit.
- the proposed pit/processing area is more than 1000 m of the nearest residence and in an area zoned for industrial use AND
- the proposed pit area/haul route has been identified as ESA3¹⁰ or less and storm water can be effectively managed AND
- the proposed pit/processing area is not within 30m^{8,10,13,23} of surface or groundwater features AND
- health risk is unlikely via dust, compromised water supply, trucking hazards, contaminants or noise disturbance^{21,22} AND
- the haul route is type B, C, or an unpaved, designated industrial route⁴ AND
- plans for staged, sustainable reclamation are annually inspected and successfully completed
- Extension of the mining permit by more than 3-4 months or expansion of the disturbed area by more than 35%²¹ (cumulative during the life of the pit permit) would trigger a re-application with public input.

This proposal would not replace existing bylaws and would mesh with Official Community Plans and provide a basis for establishing Development Permit Areas

References

1. Aggregate Mining in B.C. – A Fractured Situation October 2002
2. British Columbia Mining Plan, January 2005 “Parks, ecological reserves and other sensitive areas are protected Mining is not allowed in these areas... Action Item 48 Expand a successful aggregate pilot project model and implementation guidelines province-wide.”
3. Central Okanagan Growth Management Strategy Aggregate Supply and Demand Study RDCO, District of Lake Country, District of Peachland and City of Kelowna, June 16, 2000.
4. Pavement Design Standards Technical Circular T-9/95 Geotechnical and Materials Engineering Branch, July 10, 1995. Ministry of B.C. Ministry of Transportation and Highways.
5. Ecological Reserves Act (1979) – concerned with preservation of endangered species
6. Endangered Wildlife Act
7. Environment Canada Species at Risk Act Bill C-5 - A Guide 2001
8. Drinking Water Protection Act, B.C.
9. Greater Vancouver Sewerage and Drainage District Liquid Waste Management Plan Storm Water Plan 1999
10. Central Okanagan Municipalities and Regional District: ESA Environmentally Sensitive Areas 1,2,3 definitions and designation as Development Permit Areas; Groundwater Protection Zones
11. RDCO: Environmental Protection Discussion Paper, January 2002
12. BC Environment: Groundwater Resources of British Columbia, 1994
13. B.C. Riparian Areas Regulation – Fish Protection Act
14. Government of Ontario Aggregate Resources Act, 1990-1993
15. D.J. Beeby California Department of Conservation, Successful Integration of Aggregate Data in Land-Use Planning: A California Case Study. 1996.
16. Fraser Valley Aggregate Pilot Project
17. Reclamation And Environmental Protection Handbook For Sand, Gravel And Quarry Operations In British Columbia available from MOT
- 18 Aggregate Operators BMP Handbook for B.C., Vol 1 Apr 2002

19. Health, Safety and Reclamation Code Section 6-8

<http://www.em.gov.bc.ca/Subwebs/mining/Healsafe/mxready/mxcode01.htm> for Health & Safety Code for Reclamation)

20. B.C. Water Act

21. Environmental Assessment Act for Renewable Projects: Reviews projects with production capacity over 500,000 tons per year or 1 mil tones in less than 4 years or an increase of 35% of the production. This in under the Minister of Sustainable Resource Management

22. *Waste Management Act* www.gp.gov.bc.ca/statreg/reg/W/WasteMgmt/WasteMgmt63_88Special/63_88.htm

23. “Reclamation and Environmental Protection Handbook for Sand, Gravel and Quarry Operation in BC” 1995, by Ministry of Energy Mines & Petroleum Resources, and Ministry of Transportation

24. “Undermining our Future: How Mining’s Privileged Access to Land Harms People and the Environment” Karen Campbell, West Coast Environmental Law, 2004, www.wcel.org

25. “Bill 54 Deregulation Backgrounder” West Coast Environmental Law, 2002, www.wcel.org

26. B.C. Mines Act, Bill 54 amendments to the Mines Act

27. “Managing Aggregate, Cornerstone of the Economy” – Report of the Aggregate Advisory Council, 2001.
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