

**TO:** CITY MANAGER

1999 August 05

**FROM:** DIRECTOR PARKS, RECREATION AND CULTURAL SERVICES

**SUBJECT: BURNABY MOUNTAIN CONSERVATION AREA  
- REMEDIATION OF THE OLD GUN CLUB SITES**

**PURPOSE:** To provide Council with an update regarding the remediation of the old gun club sites in the Burnaby Mountain Conservation Area.

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**RECOMMENDATION:**

1. THAT this report be received for information purposes.

**REPORT**

At its meeting of 1999 August 04, the Parks and Recreation Commission received the above noted report and adopted the recommendation contained therein.



Kate Friars, Director  
PARKS, RECREATION  
AND CULTURAL SERVICES

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Attachment

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cc: Director Engineering  
Director Planning & Building

**SUBJECT: BURNABY MOUNTAIN CONSERVATION AREA -  
REMEDiation OF THE OLD GUN CLUB SITES**

**RECOMMENDATION:**

1. THAT a copy of this report be sent to Council for information.

**REPORT**

At the meeting of 1999 April 21, the Commission approved a report outlining a proposed remediation strategy and schedule for the clean-up of the three gun club sites. Approval was given for the expenditure of \$1.8 million (plus GST) to undertake the 1999 work plan with an additional provision of \$200,000 to be considered for the year 2000 for a detailed risk assessment of the material to be retained on site as well as ongoing monitoring.

Following that report, further assessment on site has discovered additional volumes of special waste in the upslope area. This finding, coupled with an increase in the estimated disposal fee rate has lead to revised estimates of \$2.1 million (plus GST) for 1999 and \$850,000 (plus GST) for the year 2000. Rather than seek an increase in the budget at this time, an alternative means of remediating the site at potentially less cost is being investigated.

**ALTERNATE REMEDIATION STRATEGY**

The original strategy was to remove and dispose of all Special Waste level soils off-site, and excavate and manage industrial level soils on site. Where excavation would effect unstable slopes, a risk management approach was to be applied.

In-situ management is an alternative approach of leaving the contaminants on site and treating the soils with agents that bind the contaminants to the soil or convert to a less soluble, immobile and less toxic form. This approach was initially considered but rejected due to uncertainty in the degree of effective stabilization over time. However, recent research with companies experienced with large scale remediation of similar sites in the United States using newer agents has demonstrated success with rendering contaminated soils to be non-leachable. The Ministry of Environment Lands and Parks (MOELP) has indicated that they would consider an in-situ approach upon receipt of an detailed remediation plan.

The revised approach that will be undertaken in 1999 with existing funds includes the following:

- Formally inform MOELP of the City's intent to evaluate an alternate remediation approach;

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- Continue with the construction of temporary on-site surface drainage control works. This will ensure minimal off-site discharge of contaminated lead which has been identified as a primary concern in past. It is to be noted that implementation of either the current remediation approach or the alternate approach would require this work to be undertaken to safeguard any impact to the streams;
  - Prepare a Request for Proposal to evaluate in-situ remediation approaches;
  - Seek Ministry approval of alternate remediation strategy;
  - Prepare firm cost estimate to undertake remediation work in year 2000.

Upon completion of these steps, a report will be brought back to Commission near year end with a recommended remediation strategy and detailed costs for 2000.

This review will ensure that all possible options are considered in order to implement a process that;

- achieves a significant reduction in the toxicity, volume and extent of soil contamination, including the control of off-site leachate, to the satisfaction of MOELP
- ensures the continued improvement in the environmental quality and human health protection.
- it is done at minimum cost to achieve the objectives.

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cc: Director Engineering  
Director Planning & Building

