City of Richmond

Report to Committee

To:	General Purposes Committee	**Date:**	February 14, 2002
From:	Chuck Gale, P. Eng. General Manager, Community Safety	**File:**	6175-06
Re:	**Import of Contaminated Soils to Richmond**		

Staff Recommendation

THAT staff implement Options 1, 2 and 4, as presented in the Report from the Manager of Environmental and Emergency Programs dated February 14, 2002,

AND THAT a press release of this decision be made immediately, for the benefit of concerned City residents.

Chuck Gale, P. Eng.
General Manager, Community Safety

Att. 4

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ROUTED TO:	**CONCURRENCE**
Law	Y ☑ N ☐
Zoning	Y ☑ N ☐

625515

Staff Report

Origin

An article which appeared in the January 24, 2002 issue of the Globe and Mail generated considerable public interest concerning the importation of contaminated soils for treatment at a facility in Richmond. This issue sparked controversy due to negative perceptions concerning importing contaminated materials from the U.S., and is further complicated by confusion around the differences between Canadian and U.S. standards for treatment of this type of waste.

To address this issue, staff requested further information from the Ministry of Water, Land and Air Protection as outlined in Attachment 1. The Ministry's response is contained in Attachment 2. In addition, staff has attempted to develop options for Council's consideration, that do not compromise the City's jurisdiction.

Background

Hazco Environmental Services has operated a soil treatment facility on a portion of the Ecowaste Landfill since January, 1998. Hazco process approximately 300,000 tonnes of material annually, of which half is hydrocarbon-contaminated soil (from gas stations, etc.). Contaminated soil is remediated to at least industrial standards, and most often to residential standards, before being deposited in the Ecowaste landfill. The balance is a mix of non-contaminated and contaminated soil below and above industrial grade. These materials are deposited directly in the landfill, with materials that are above industrial grade being managed on a "risk-based approach", to ensure that options are maintained for the broadest use of the land after closure, (in 30 years).

Hazco Environmental is a proponent on a project in Oregon to accept 8,600 tonnes of pentachlorophenol (PCP) contaminated soil, for treatment, from a manufacturer of wood preservatives. There is no scheduled date for the transport of the soil, although it is likely several months away. The following facts apply:

- British Columbia's contaminated sites regulations classify Special Waste as:
  - soil exceeding 60 ppm PCP, and
  - soil exceeding 100 ppb TEQ of dioxins and furans.
- Soil with up to 2.5 ppb TEQ of dioxins and furans is classified as Industrial Waste.
- The soil to be received by Hazco contains 74 parts per million (ppm) of PCP, and trace amounts of dioxins and furans, estimated at 3 parts per billion (ppb) TEQ (toxic equivalent).
- After treatment, the soil will have 10 ppm PCP, before landfilling as industrial waste. Hazco plans no specific treatment for the dioxins and furans, although the PCP treatment process may reduce the dioxins and furans to below Industrial Waste.

What is Pentachlorophenol (PCP)?

PCP is a manufactured chemical used predominately as a wood preservative to protect timber (e.g. power line poles, railroad ties, fence posts, etc.) from insects and fungi. PCP generally remains attached to soil particles, but can become mobile in water under certain conditions. PCP contaminated soil can be treated through bioremediation.

What are Dioxins and Furans?

Dioxins and furans are closely related compounds produced from the incomplete combustion of organic material. They can be produced naturally during forest fires or volcanic activity, but are also caused by the combustion of fossil fuels (coal, oil and natural gas) and waste incineration. They have also been formed during the chlorine bleaching process used by the pulp and paper industry. Dioxins and furans are released into the atmosphere through combustion activity and are deposited throughout the environment in water, soil, etc. They are thought to bind strongly to soil particles, and are persistent, taking a number of years to degrade.

Approval Jurisdictions and Process

The Federal Government regulates transboundary and inter-provincial movement of hazardous waste, the import and export of waste under the Canadian Environmental Protection Act (CEPA) and the Export and Import of Hazardous Waste Regulations.

The Provincial Government regulates treatment facilities and intra-provincial movement of waste, and ensures that the intended treatment facility is licensed to accept and treat the waste proposed for importation. The province also sets the standards that soils must meet before and after treatment.

The federal government consults with the provincial government on specific project or permit issues.

The City's jurisdiction is limited to controlling things such as land use, business licensing, etc. as outlined in the memo from the City Solicitor, (Attachment 3). The City of Richmond was not consulted or notified of the application/approval for this particular Hazco contract, because it falls outside of our jurisdictional authority. The Province do not notify a municipality of an impending soil importation. Municipalities are consulted before treatment facilities are approved for construction/installation as part of the provincial licensing process. The City of Richmond did not object to the licencing of the Hazco Treatment facility.

To the best of our knowledge, Hazco Environmental followed all appropriate processes and obtained the necessary approvals and licences to import the soil material being discussed.

Federal Government Review of Hazardous Waste Regulations

At a recent workshop on this issue, the federal government advised it is currently reviewing its Export and Import of Hazardous Waste Regulations. This review was precipitated by recent amendments to CEPA, (Canadian Environmental Protection Act), which provides additional regulatory powers, including the ability to refuse permits for import or export if pre-determined criteria establishing environmentally sound management are not met. Revisions are also being made to improve US-Canadian harmonization. In recent years, there has been a net increase in the importation of hazardous wastes from the US to Canada, principally to Ontario and Quebec. According to Environment Canada, this increase in importation was largely due to differences in landfilling and liability standards. Environment Canada is working toward the goal of harmonizing the border and is currently commissioning a study to identify management gaps between the US, Mexico and Canada.

BC Contaminated Sites Regulation

The contaminated sites regulation was enacted on April 1, 1997. With this regulation, the province assumed overall responsibility and liability for contaminated sites. The City has a limited involvement in the administration of the regulations. When a development application is received for subdivision, rezoning, development permit, demolition permit, soil removal approvals or permits, on industrial or commercially-zoned properties, City staff review the site profile that is completed by the applicant, and either process the application or refer the application to the province for consideration according to a set of established rules. Where applications are referred to the province, approvals are withheld pending receipt from the province of a certificate of compliance. The province assumes all administrative and technical responsibility for evaluating and approving applications.

When the regulation was implemented, municipalities were given the opportunity to "opt out" of the site profile review process. This would have permitted local governments to develop their own screening system or ignore, as a matter of policy, the screening of potentially contaminated sites. In so doing, the City would have assumed all associated liability and higher administration costs. In addition, approval and concurrence of the province would be required if the City adopted a standard that differs from the province (see comments from City Solicitor – Attachment 4). For these reasons, opting out of the contaminated sites regulation was a very unattractive option for the City. Therefore, the City's previous soil deposition bylaws were rescinded, and the City opted into the site review process outlined by the province.

As noted in Attachment 1, the City asked the Ministry of Water, Land and Air Protection to compare the BC contaminated sites regulations to the City's previous soil deposition bylaws. The Ministry's response, as contained in Attachment 2, indicated that the provincial contaminated sites standards are more stringent than Richmond's previous soil bylaws. Furthermore, Richmond's rescinded bylaws would have permitted this soil shipment to be remediated at the Ecowaste Landfill.

Options

Given the interest expressed by Council to determine whether or not the City can influence the importation of contaminated soils, staff has determined that the City has no legal jurisdiction in this regard. The import/export of these materials is controlled by the Federal government, and the soil standards/approvals are controlled by the Province. In light of this, some options for action by the City might include:

1. Lobbying the Province requesting that they:

   a) undertake a review of the contaminated sites regulations to ensure BC *standards* are comparable to the U.S. and the rest of Canada. This would ensure that no hazardous materials are brought to BC due to a lower BC standard. Council may want to express an opinion regarding the BC standards and whether or not they should meet or exceed other applicable standards.

   b) include a public notification process and present citizens an opportunity to be heard on situations where the import of hazardous materials may impact them. An appeal process for applicants should also be provided, for example, to the Environmental Appeal Board or equivalent body.

   c) Have their professional staff meet with local citizens concerned with the proposed importation, and reassure them that there are no adverse impacts from the impending importation of contaminated soil to the Hazco Environmental site.

2. Lobby the Federal Government

   a) Request that the federal government meet with impacted citizens, and provide details on the health impacts of the proposed import/treatment/disposal of the contaminated soils that they have permitted.

   b) The federal government could be requested, as part of their review of amendments to the Export and Import of Hazardous Waste Regulations, to:

      i) Prohibit imports or exports of any waste material where standards differ between the two jurisdictions to ensure that the importation would not occur due to less restrictive management standards in Canada.

      ii) Ensure consistency across Canada for hazardous materials treatment/disposal.

      iii) Work collaboratively with the provinces and the US to ensure policies and regulations throughout all jurisdictions encourage on-site treatment and, where necessary, waste disposal at the closest available facility.

3. Undertake an Environmental Impact Assessment

   a) Council could direct staff to undertake an independent review of the environmental and health impacts of the contaminated soils intended to be brought to Richmond. The site operator could be requested to fund such a review. This option would provide the

advantage of examining risks based on site-specific conditions rather than solely relying on provincial standards. This approach is not heavily favoured, as the scope of the project and the precedent set may be well beyond the capacity of the City and the Committee to support.

4. Make a Request to the Site Operator

   a) If desired by Council, staff could arrange a meeting with the site operator and City Council/staff. The City could request that the operator not proceed to accept the contaminated soil in light of the community's reaction and concerns. Our appeal could be based entirely on a good-will gesture and in the spirit of public good. This would be based on a single request, in order not to compromise future work for a locally-based business, and as a recognition of the fact that hazardous waste from our area is delivered to various sites in the US. If accepted by the company, this approach would also allow time for the previously referenced review by the Federal government to conclude.

5. Zoning Bylaw

   a) As noted in previous correspondence from the City Solicitor, the City's jurisdiction in this case is limited to regulating land use, licensing, etc. There is a reference in the City's Zoning Bylaw where the definition of *Industry*, "specifically excludes the processing, storing, transporting and distributing of bio-medical or other material defined by statute as being hazardous waste". The City could exercise this option under the bylaw, indicating that the contaminated soil falls under the definition of "hazardous waste" and is thereby prohibited under the Zoning Bylaw. It should be noted that hazardous waste is not defined in the City's bylaw. There are no provincial statutes that use this term. The federal Transportation of Dangerous Goods Act does define hazardous waste.

   b) Staff does not recommend this course of action because this term is loosely applied in the bylaw, and there are several facilities already in Richmond which store or otherwise manage hazardous waste materials. To apply the bylaw for a matter of convenience in this case would likely open the bylaw up to challenge. Furthermore, the province provided the City the opportunity to comment during the licensing phase prior to approving the Hazco Environmental facility, and the City did not object to the licence.

6. Public Forum

   a) The City of Richmond, to discuss the issue of hazardous waste import/export could host a public forum. Representatives from the federal and provincial governments could be invited to participate to explain current regulations and requirements concerning the transboundary movement of wastes. Ecowaste and Hazco Environmental could also be invited to participate. This would allow an opportunity to explain in further detail the soil import proposal, and provide Richmond residents the opportunity to ask questions and express their views concerning this issue. These comments could then formulate part of the City's response to the federal and provincial governments concerning their reviews of this issue.

7. Establish a Process with the Site Operator

   a) The City could request that the site operator develop a "Best Management Practices" standard for the Ecowaste site. This could include issues such as environmental monitoring, policies on types of waste accepted, etc., and making this information available to the Richmond community. The City could work with the site operator to develop these practices, which could also be made available to the public.

Commentary

The issue of managing, processing and disposing of contaminated soils is very complex. It requires a very high level of technical and scientific expertise that is well beyond the capability of the City to address. In addition, it is an emotionally charged issue that has very strong advocates for almost any stance or position that could be taken. Thus, it is staff's position that we are not equipped to address or respond to the concerns or needs of our businesses or citizens in the management of this complex issue. In fact, it was for this reason, among others, that the City originally resolved to not become involved in the management of contaminated soils.

In this circumstance, staff believe this issue is best left with the provincial and Federal government to manage with their more highly qualified staff. However, we also believe it appropriate for Council to represent the concerns of the City's residents, and to advocate on their behalf. To this end, we therefore recommend options 1, 2, and 4 as possible directions.

The City's Advisory Committee on the Environment (ACE) has expressed an interest in this issue and will be reviewing this matter as part of its mandate at their February 20, 2002 meeting. Council's decision on this report will be communicated to ACE at their meeting, and staff will undertake to have regular discussions with the Chair of ACE to best determine how ACE wishes to advise the City on the implementation of Council's resolution/s.

It is also important to recognize the expression of community concern -- to both the City and the province – on this issue. In this regard, the province has expressed an interest and willingness to work openly with the City on this matter to ensure that environmental standards in BC are respected. Staff feel it would be appropriate to work cooperatively with the province on the implementation of the recommendations contained in this report.

Financial Impact

Depending upon the decision of Council, staff may report back on the financial ramifications of selected options.

Suzanne Bycraft
Manager, Emergency & Environmental Programs

SJB:

625515

Attachment 1

City of Richmond
6911 No.3 Road, Richmond, BC V6Y 2C1
Telephone (604) 276-4000
www.city.richmond.bc.ca

January 28, 2002
File: 6175-06

Environmental Programs
6911 No. 3 Road
Richmond, BC V6Y 2C1
Info Line: (604) 276-4010
Fax: (604) 276-2758 / 276-4222

Ms. Joyce Murray
Minister, Water, Land & Air Protection
P.O. Box 9047
Station Prov. Govt.
Victoria, B.C.
V8W 9E2

Dear Ms. Murray:

Re: Proposed Import of Contaminated Soils

Thank you for participating in a conference call with Richmond City Council members and staff last Friday, January 26, 2001, regarding the import of contaminated soils intended for disposal within the City of Richmond.

Further to our discussion, we have provided a copy of the City's former soil regulation bylaws 5744 and 5712 to Mr. Rob Dalrymple (via fax #250-953-3856) on this date. We respectfully request that you review and advise us how our rescinded bylaws compare with the requirements outlined in the province's contaminated sites regulation. It was our understanding that the provincial regulations would be at least comparable (if not more stringent) than those the City of Richmond had in place at the time our bylaws were rescinded. We would also request that you clarify the differences between the provincial/federal standards and those of the United States for the treatment/disposal of waste materials containing pentachlorophenol and dioxin.

Additionally, the City of Richmond wishes to review its options for implementing restrictions on the import of contaminated soils. Please advise what the City's options are for doing so, whether ministerial approval is required, and any liability or other implications the City might assume.

We appreciate the role of the Ministry in this regard. This issue has presented a significant concern to the residents of Richmond. We would appreciate your urgent response to the issues discussed in this letter.

Yours truly,

Chuck Gale, P. Eng.
General Manager, Community Safety

RICHMOND
Island City, by Nature

615551

Attachment :

BRITISH COLUMBIA

Date typed: February 7, 2002
ARCS: 280-30/MO
ORCS: 66250-01
Reference: 65905

Chuck Gale
General Manager, Community Safety
City of Richmond
6911 No. 3 Rd
Richmond BC V6Y 2C1

Dear Chuck Gale:

Thank you for your letter dated January 28, 2002, regarding the proposed import of waste soils for treatment and disposal within the City of Richmond.

We have reviewed Richmond's rescinded bylaws as supplied to us and compared the management standards contained therein to those contained in the Contaminated Sites Regulation (CSR) for dioxins/furans and pentachlorophenol. There are no relevant concentrations in any of the Schedules provided by the City of Richmond for dioxins and furans. In the absence of any concentrations in the City of Richmond's bylaw Schedules to regulate dioxin/furans, the CSR Schedule 7 dioxin/furan standards for soil relocation are more stringent. The City of Richmond concentrations that would apply to pentachlorophenol were compared to the CSR Schedule 7 standards. The CSR pentachlorophenol standard is more stringent than the concentrations listed in the City of Richmond bylaw Schedule. Therefore, it is our conclusion that Richmond's rescinded bylaw would have permitted this soil shipment to be remediated at the Ecowaste landfill.

The differences between the provincial/federal standards and those of the United States for the treatment/disposal of pentachlorophenol and dioxins/furans have also been assessed per your request for clarification. The BC treatment requirement for pentachlorophenol for the disposal of the treated soil in the Ecowaste landfill is more stringent than the US treatment standard. The situation for dioxins and furans is not as clear due to a complication inherent in the different approaches used by the US and BC/Canada to regulate these compounds. The US regulates dioxins/furans by individual compounds or compound groupings while British Columbia and the rest of Canada regulate these compounds on the basis of 2,3,7,8 TCDD toxicity equivalency factor or TEQ. In some respects British Columbia's standards for dioxins and furans are more stringent than current US EPA standards and in other respects they are less so.

Finally, you asked for my advice on options available to Richmond for implementing local restrictions on the import of contaminated soil. Section 723 of the Local Government Act (LGA) is applicable. Essentially, this legislation states that a bylaw provision related to such restrictions (e.g.: a prohibition or quality/contamination limits) would have no effect unless that provision is approved by the Minister of Community, Aboriginal & Women's Services with the concurrence of the Minister of Water, Land and Air Protection. As I may eventually have to exercise statutory powers as per sec 723 of the LGA, I suggest that Richmond seek its own independent legal advice on available options in order for me to avoid a potential position of prejudice in the future.

Ministry of Water, Land and Air Protection

Office of the Minister

Mailing Address:
Parliament Buildings
Victoria BC V8V 1X4

In closing, I would like to thank you for writing to me about this issue. I understand and appreciate the level of concern that this has caused to the residents of Richmond. This government has no intention of allowing British Columbia to become a dumping ground for hazardous waste from the United States. My ministry is currently engaged in a comprehensive effort to review all of our regulations and legislation, with the aim of improving our processes and, where the best available science indicates, updating standards that protect human health and the environment.

Please feel free to contact my office or me at any time on this or any other issue. We will keep the City of Richmond appraised of our progress in reviewing these and other standards set by the previous government.

Best regards,

Joyce Murray
Minister

dalrymple/mc(EM)

bcc: Minister's Office
Eric Partridge, Environmental Management Branch

City of Richmond
Law Department

Memorandum

To:	Suzanne Bycraft Manager, Emergency & Environmental Programs	**Date:**	January 30, 2002
From:	Paul Kendrick City Solicitor	**File:**	-

Re: Role of Federal Government in importation of contaminated so0ils

The Federal Government through regulations under the Canadian Environmental Protection Act controls the importation (and export) of Hazardous Material. The Province, on the other hand, sets the standards soils must meet before and after treatment.

The federal rules deal with such things as:

- Ensuring that prior notice is given to Environment Canada before the material is moved
- Ensuring that prior approval is given before the material goes trans-border
- Issues a waste management manifest is issued that must accompany material in transit
- Copy of manifest sent to appropriate province
- Importer must provide a copy of contract dealing with disposition of material
- Ensuring that these is adequate insurance to cover problems during transit
- Ensure there are contingency plans in place
- Ensuring the proper warning signs are displayed by the carrier

In essence Canada looks after the transportation to the site for remediation, storage or recycling. Provincial regulations may stop the material from being treated in their province, in which case the Federal government would not issue a permit with that province as a destination.

The City's jurisdictions would be restricted to those areas the province has given it power to regulate. That would include such things such as land use, business licensing etc.

Paul Kendrick
City Solicitor

PK:pk

Attachment 4

Kendrick, Paul

To: Daykin, Margot; Gale, Chuck
Cc: Kelvin Higo (E-mail)
Subject: Contaminated Soil

CURRENT SITUATION

There is a plan in place to bring soils into Richmond from the United States for treatment. This soil meets the current standards set under the Provincial Waste Management Act. The soil will be treated for the removal of certain hydrocarbons at the Hazco facility on Vulcan Way and then deposited on the Ecowaste site. The soil also contains dioxin, but at a level below the provincial standard.

QUESTION

Can the City adopt standards more stringent than the existing provincial standards, and, if so, what approvals would be required?.

LEGISLATION

The Local Government Act section 723 sets out the power of the City to control the removal and deposit of soil. In 1997 section 723 (4.1) was added. It reads as follows:

(4.1) A provision in a bylaw under subsection (2) that prohibits the deposit of soil or other material and that makes reference to quality of the soil or material or to contamination, has no effect until the provision is approved by the minister with the concurrence of the Minister of Environment, Lands and Parks.

The Waste Management Act also deals with the issue of the City's ability to set standards for soils being brought into the City. This Act authorizes the City to pass bylaws regarding deposit or removal of contaminated soil subject to significant conditions:

25 (6) A municipality, including its employees or elected officials, does not incur any liability and must not be considered a responsible person under this Act as a result of any bylaw, permit, licence, approval or other document issued under the Islands Trust Act, the Local Government Act or the Vancouver Charter that authorizes the removal or deposit of contaminated soil in the municipality.

25 (7) Despite section 25 (5), subsection (6) of this section does not apply if

(a)	*a bylaw of a municipality, or*	
(b)	*a permit, licence, approval or other document issued under the authority of a municipal bylaw*	

establishes standards or procedures for testing, excavating, storing, removing, relocating or depositing contaminated soil that conflict with this Act, the regulations, a permit, approval, order, contaminated soil relocation agreement or an approved waste management plan.

ANALYSIS

The City can set its own standards for soil, but any such bylaw would require the approval of the Minister of Energy, Mines and Petroleum (LGA section 723 (4.1).

If the City passes a bylaw that estalishes standards of depositing contaminated soil that differs from those set out in the regulations adopted under the provincial Wast Management Act, it can be considered a responsible

person under the Act and loses the general liabilty protection.

There are many liability issues arising out of being considered a "responsible person" under the Waste Management Act., including the cost of cleanup and all the associated fees and charges. Section 25(7) removes the protection given to the City under section 25(6) if a city bylaw contains standards for the deposit of soil different than that set out in provincial legislation.

CONCLUSION

The City's jurisdiction in this area is restricted by the necessity of approval by the Minister and by the risks of foregoing the protection given the City under the Waste Management Act. Without the support of the Provincial Government the City should not (and probably can not) adopt its own standards for soil being brought into Richmond.

Paul Kendrick
City Solicitor
City of Richmond
(604) 276-4104