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MANAGER'S REPORT NO.	67
COUNCIL MEETING	90/11/05

TO: MUNICIPAL MANAGER 1990 NOVEMBER 01

FROM: ACTING CHIEF PUBLIC HEALTH INSPECTOR

SUBJECT: G.V.R.D. REFUSE INCINERATOR
ENVIRONMENTAL STANDARDS AND COMPLIANCE

PURPOSE: TO INFORM COUNCIL OF THE CURRENT ENVIRONMENTAL STANDARDS USED TO REGULATE AIR EMISSIONS AND ASH FROM THE G.V.R.D. INCINERATOR, COMPLIANCE WITH THESE STANDARDS INCLUDING AN UPDATE ON ASH MANAGEMENT, AND TO DISCUSS THE FEASIBILITY OF ENFORCEMENT OF STANDARDS FOR ASH TOXICITY.

RECOMMENDATIONS:

1. THAT a copy of this report be forwarded to:
 - a) The Honourable John Reynolds, Minister of Environment.
 - b) Mayor G. Blair, Chairman, Greater Vancouver Regional District.
2. THAT Council direct staff to meet with the Ministry of Environment and Greater Vancouver Regional District Officials to express Council's concerns regarding proposed amendments to the B.C. Special Waste Regulations and long term utilization of G.V.R.D. Incinerator ash.
3. THAT the Honourable John Reynolds, Minister of Environment, be requested to reconsider the establishment, as a requirement of a Waste Management Permit for the G.V.R.D. Incinerator ash storage, an Ash Technical Review Committee for ash disposal and utilization.

REPORT

1.0 INTRODUCTION:

During the regular Council Meeting on 1990 February 05, Council received a Municipal Manager's Report on the G.V.R.D. Incinerator Ash Management and adopted the recommendations contained in the report.

Arising from the discussion, Council also referred recommendation to staff for investigation and evaluation of enforcement of standards for ash toxicity, including the closure of the G.V.R.D. Incinerator if it exceeds the environmental standards.

This report will serve to inform Council on the current standards used to regulate air emissions and ash from the G.V.R.D. Incinerator, compliance with these standards including an update on ash management, and discuss the feasibility of enforcement of standards for ash toxicity.

2.0 ENVIRONMENTAL COMPLIANCE STANDARDS FOR THE G.V.R.D. INCINERATOR:

2.1 Air Emissions

As a part of the approval process for the G.V.R.D. Incinerator, the Ministry of Environment had required the monitoring of air pollutants with set maximum allowable limits.

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The Ministry has subsequently also adopted the "Canadian Council of Resource and Environment Ministers (CCREM) Operating and Emission Guidelines for Municipal Solid Waste Incinerators" to regulate the time averaging periods for various air pollutants.

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It should be noted that the CCREM Guidelines provide uniform minimum requirements for operation of Refuse Incinerators in Canada, and staff in previous reports have indicated concerns regarding longer time averaging periods of air pollutants from the incinerator.

2.2 Ash Disposal and Utilization

Presently G.V.R.D. is adhering to the CCREM requirements for disposal of ash at the Coquitlam Landfill. The Special Waste Regulation, which is enforced by the Ministry of Environment, does not have a prescribed method for incinerator ash residual disposal. The regulation however, is used to determine whether a material, in this case ash or leachate from the landfill, qualifies as a Special Waste and thereby requires "special" handling.

According to the Ministry of Environment, there are various amendments being considered to the existing Special Waste Regulation which could affect the management of the incinerator ash. The proposed amendments include:

- a) A procedure for delisting a Special Waste(s) where it is shown that the waste(s) or treated waste(s) will not cause pollution. Environment Canada's Waste Water Technology has recommended a protocol for testing of treated waste(s) which is being used as an interim protocol by the Ministry of Environment.
- b) Lowering of the regulatory level of leachable lead from present limit of 5 milligrams/litre to 1 milligram/litre.

Environmental Health Division staff are currently in a process of acquiring a copy of the Ministry's Interim Protocol for Delisting Special Waste.

3.0 COMPLIANCE OF G.V.R.D. INCINERATOR TO ENVIRONMENTAL STANDARDS:

A review of the air emission data by the Ministry of Environment has shown that the overall plant air emissions have been within the permitted limits and the incinerator is in compliance.

With respect to the ash, currently the bottom ash is not considered as a Special Waste. On the other hand, the fly ash is considered as a Special Waste according to the Special Waste Regulation primarily due to the presence of elevated lead levels. However, if the proposed amendments to the regulations are approved, than the bottom ash will also be classified as Special Waste.

According to the Ministry of Environment, an Application for a Permit for Storage of Special Waste related to the fly ash was submitted by the G.V.R.D. in January 1990, but a permit has not been issued yet.

4.0 G.V.R.D. INCINERATOR ASH MANAGEMENT UPDATE:

As a long term utilization and management of the ash, in particular the fly ash, G.V.R.D. with the assistance of a local consultant has conducted a series of tests using various Portland cement based formulations, results of which indicate that the fly ash can be treated by solidification/stabilization. A concrete batch plant has also been temporarily installed at the incinerator to assess the effects of full scale batches on treatment parameters.

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The treated ash from the pilot plant is proposed by G.V.R.D. to be subjected to the requirements of the interim protocol used by the Ministry of Environment. This implies that if the proposed amendments to the Special Waste Regulation are approved, and if the treated ash from the pilot plant meets the protocol requirements, than the fly ash can be delisted as a Special Waste.

5.0 ENFORCEMENT OF THE ENVIRONMENTAL STANDARDS:

The Ministry of Environment is the agency that has the authority to regulate the above mentioned environmental standards and ensure that the G.V.R.D. Incinerator is in compliance with the requirements.

Presently, while the air emissions from the incinerator are within the permitted limits and the issuance of a storage permit from the Ministry of Environment for fly ash will allow for the intent of the Special Waste Regulation to be met, the only outstanding issue of concern is the proposed amendment to the Special Waste Regulation which deals with the delisting of Special Waste, in particular the incinerator ash, and the long term utilization of the ash.

Council has had serious concerns in the past regarding incinerator ash utilization and has also written to the Minister of Environment requesting the formulation of a technical review committee for ash disposal and utilization or expanding the terms of reference of the current technical review committee for air emissions, to include review of ash management.

It is therefore staff's opinion that Council direct staff to meet with the Ministry of Environment and Greater Vancouver Regional District Officials to express Council's concerns regarding proposed amendments to the Special Waste Regulations and long term utilization of the G.V.R.D. Incinerator ash. Furthermore, the Minister of Environment should be requested to reconsider the establishment, as a requirement of a Waste Management Permit for the G.V.R.D. Incinerator ash storage, an Ash Technical Review Committee for ash disposal and utilization.

6.0 CONCLUSION:

The current environmental standards used to regulate air emissions and ash from the G.V.R.D. Incinerator are enforced by the Ministry of Environment.

The approval of proposed amendments to the Special Waste Regulation can result in delisting of the incinerator ash as a Special Waste.

The air emissions from the G.V.R.D. Incinerator are currently complying with the existing limits and the issuance of a Permit to Store Special Waste, particularly for the fly ash, will allow for the intent of the Special Waste Regulation to be met.

The outstanding issue of concern relates to the delisting of the incinerator ash if the proposed amendments to the Special Waste Regulation are approved, and the long term utilization of incinerator ash.



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ACTING CHIEF PUBLIC HEALTH INSPECTOR

DD/KCJ/gl

cc: Medical Health Officer
Director Administrative &
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Municipal Solicitor

