

ITEM	4
MANAGER'S REPORT NO.	51
COUNCIL MEETING	93/09/07

TO: CITY MANAGER 1993 AUGUST 31

FROM: MEDICAL HEALTH OFFICER

SUBJECT: TICOR TECHNOLOGY LIMITED,  
4623 BYRNE ROAD, BURNABY

- PURPOSES: 1. TO INFORM COUNCIL OF:
- (a) THE ENVIRONMENTAL APPEAL BOARD AND THE G.V.R.D.'S RESPONSES TO COUNCIL'S REQUEST FOR INFORMATION PERTAINING TO TICOR TECHNOLOGY LIMITED'S APPLICATION TO AMEND THEIR AIR EMISSION PERMIT VA-383;
  - (b) STAFF'S EVALUATION OF THE TRIAL BURNS UNDERTAKEN BY TICOR TECHNOLOGY LIMITED IN RELATION TO TICOR'S REQUEST TO TREAT ADDITIONAL WASTE STREAMS AT THEIR BURNABY OPERATION;
2. TO RECOMMEND A REVIEW PROTOCOL TO COUNCIL FOR FUTURE TRIAL BURNS TO BE CONDUCTED BY TICOR TECHNOLOGY LIMITED.

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RECOMMENDATION:

- 1. THAT a copy of this report be forwarded to:
  - a) Ms. Lorna Hancock, Executive Director, Health Action Network Society, #202-5262 Rumble Street, Burnaby, B.C., V5J 2B6.
  - b) Mr. Robert S. Smith, Administrator, Air Quality Control, Air Quality & Source Control Department, G.V.R.D., 4330 Kingsway, Burnaby, B.C., V5H 4G8.
- 2. THAT the G.V.R.D. be requested to forward all future trial burn plans submitted by Ticor Technology Limited to Environmental Health Services of the Burnaby Health Department for their review, and to withhold granting any authorization to Ticor Technology Limited for any trial burns prior to receiving comments from the Burnaby Health Department;

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3. THAT the G.V.R.D. be requested to forward all future trial burn results submitted by Ticor Technology Limited to Environmental Health Services of the Burnaby Health Department for their review, and to withhold granting any authorization to Ticor Technology Limited for continuous burning prior to receiving comments from the Burnaby Health Department.

### REPORT

#### 1.0 INTRODUCTION

At the regular Council Meeting on 1993 March 08, a report on the above captioned subject was submitted by the City Manager (Item No. 06, City Manager's Report No. 15).

The said report was TABLED to allow Council additional time to review it. Furthermore, Council directed staff to request the Environmental Appeal Board to extend its deadline for filing an appeal with respect to the issuance of an amendment to the G.V.R.D. Air Emission Permit VA-383.

This report provides a summary of responses from the Environmental Appeal Board and the G.V.R.D. with respect to Council's request. It also highlights staff's evaluation of the trial burns conducted by Ticor Technology Limited and staff's recommendations on a review protocol for future trial burns.

#### 2.0 THE ENVIRONMENTAL APPEAL BOARD AND THE G.V.R.D.'S RESPONSES TO COUNCIL'S REQUEST IN RELATION TO AN APPLICATION BY TICOR TECHNOLOGY LIMITED TO AMEND THE AIR EMISSION PERMIT VA-383

Ticor Technology Limited, a Division of Philips Environmental Services, is located in a M3 (Heavy Industrial District) zone and has been in operation since 1988.

In June 1992, Ticor Technology Limited filed an application with the G.V.R.D. to amend their existing Air Emission Permit VA-383. The amendment is in relation to Ticor Technology Limited's request for an operational change from a titanium dioxide reclamation facility to a Special Waste Thermal facility. This would mean the treatment of other waste streams (waste ink: printer's ink, resins, oil and fuel filter media, and hydrocarbon contaminated soils) in their incinerator in addition to treating waste paint and related sludge.

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Ticor Technology Limited was required to publish the Permit amendment application and serve all neighbouring businesses and tenants with a copy of the said application. Public comments and a review of the dispersion modeling study by Ticor Technology Limited were taken into consideration by the G.V.R.D.'s staff in processing the said application.

On 1993 January 26, an amended permit was issued to Ticor Technology Limited allowing Ticor to conduct twenty hour period trial burns for each material identified in their application provided a trial burn plan was approved in writing from the G.V.R.D. Air Quality Director. The amendment further stipulates that any processing of similar materials is prohibited until results of the trial burns have been reviewed and further written approval has been granted by the G.V.R.D. Air Quality Director.

On 1993 March 18, a letter was written by the Director Administrative & Community Services requesting assurance from the Environmental Appeal Board that the amended permit only authorizes Ticor Technology Limited to conduct trial burns and that continual burning would require the filing of a full application which includes a public review and appeal process during which the City would be allowed to file an appeal. In response, the Environmental Appeal Board, in their letter of 1993 April 29, advised the City to direct their questions to the G.V.R.D. (see Attachment #1). As a result, a letter was written by the Chief Environmental Health Officer on 1993 May 11 to Mr. Robert Smith, Administrator, Air Quality Control, G.V.R.D. regarding the aforementioned issues (see Attachment #2).

In their response (see Attachment #3), the G.V.R.D. indicated that the amended permit authorizes Ticor Technology Limited to a total of 20 hours of trial burns for each of the waste streams identified in their Permit amendment application. Subsequent to reviewing the trial burns' results, the Air Quality Director can either issue a short term Authorization or grant authorization by amending the relevant sections of their permit. Ticor Technology Limited, however, is not required to file another formal application for an Authorization or permit amendment since they have clearly identified these additional waste streams in their earlier applications.

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In response to the G.V.R.D.'s letter, the Chief Environmental Health Officer, on 1993 June 18, sent a letter to the G.V.R.D. requesting them to defer making any Permit amendment and/or granting an Authorization until Environmental Health Services' staff have had an opportunity to review the trial burn results, report to Council of staff's findings and recommendations, and subsequently notify the G.V.R.D. of Council's position on the subject application.

3.0 TRIAL BURNS OF SPECIFIC WASTE STREAMS UNDERTAKEN BY TICOR TECHNOLOGY LIMITED

Ticor Technology Limited completed the authorized trial burns for ink waste and Mono-Ethyl-Amine (MEA) filter media in February and March of 1993 respectively.

A review of the submitted technical information and trial burn results indicates that the technical performance of the incinerator is not in question. The human component for the operation of the incinerator, however, is an area where potential problems may occur.

Since this incinerator will be manually fed, there is a definite need to train workers adequately in responding to changing feedstock conditions. The Operating Plan must be clear in the procedures to be followed and these procedures must be clear to all operations staff. Protocol must also be established to require staff to review these operation procedures periodically to ensure familiarity.

4.0 APPROVALS REQUIRED FROM THE CITY OF BURNABY

In order for Ticor Technology Limited to process additional identified waste streams in their facility, they have filed an application to the Planning and Building Department for a change of use through the Preliminary Plan Approval procedure. The Preliminary Plan Approval Application has been reviewed and approved.

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## 5.0 CONCLUSION

With respect to the application by Ticor Technology Limited to treat additional waste streams in their Burnaby facility, Ticor has been authorized to conduct trial burns for each of the identified materials. Subject to the results of the trial burns, the G.V.R.D. Air Quality Director may either issue a short term Authorization or grant authorization by amending relevant sections of Ticor's permit thereby allowing Ticor to burn these additional wastes continuously.

Ticor has completed the trial burns for ink waste and MEA filter media. Based on all submitted technical data, the technical performance of the incinerator is not in question. However, it is imperative that, as conditions of approval, Ticor Technology Limited be required to implement an adequate staff training program; to develop a comprehensive Operation Plan that is clear and can be easily followed by all operations staff; and to establish a protocol requiring all operations staff to periodically review the operational procedures to ensure familiarity.

In terms of future trial burns for waste streams previously identified by Ticor Technology Limited, the G.V.R.D. should be requested to withhold granting any approval for future trial burns and subsequent continuous burning until staff of Environmental Health Services of the Health Department have had an opportunity to review the technical information on the proposed trial burns and subsequent trial burn results and submitted their comments to the G.V.R.D.



Arlene King, M.D., C.C.F.P., M.H.Sc., F.R.C.P.(C)  
MEDICAL HEALTH OFFICER

TS/AK/dd

cc: ( ) Chief Environmental Health Officer  
( ) Director Administrative & Community Services  
( ) Director Planning & Building  
( ) Chief Licence Inspector



Province of  
British Columbia

# Environmental Appeal Board

Victoria, British Columbia  
Telephone (804) 387-3484  
Facsimile (804) 358-9923

Mailing Address:  
Parliament Buildings  
Victoria, British Columbia  
V8V 1X5

ATTACHMENT #1

April 29, 1993

VIA FACSIMILE: 294-7710

Mr. Robert Moncur, Director  
Administrative and Community Services  
Corporation of the District of Burnaby  
4949 Canada Way  
Burnaby, British Columbia  
V5G 1M2

Sir:

Thank you for taking the time to clarify, by telephone, the purpose of your March 18, 1993, letter to the Board. I understand you were not seeking to appeal the permit, but rather were looking for answers to specific questions about the purpose and future of the permit.

The Environmental Appeal Board is mandated by the *Environment Management Act* only to hear appeals against decisions/orders/permits. The Board is, therefore, not in a position to provide the clarification you are seeking. You may wish to put your questions to the author of the permit.

In the event that, once receiving those answers, you find it necessary to appeal the permit please forward to this office the grounds for appeal and a cheque for \$25 payable to the Minister of Finance and Corporate Relations.

If a notice of appeal and cheque are not received by this office by May 14, 1993, the Board will consider you have decided not to appeal.

Yours truly,

Linda Michaluk, R.P. Bio.  
Chairman  
Environmental Appeal Board

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1993 May 11

Mr. Robert S. Smith  
 Administrator, Air Quality Control  
 Air Quality & Source Control Department  
 G.V.R.D.  
 (Metrotower II)  
 4720 Kingsway  
 Burnaby, B.C.  
 V5H 4N2

Dear Mr. Smith:

RE: AMENDED G.V.R.D. AIR EMISSION PERMIT VA-383  
 ISSUED TO TICOR TECHNOLOGY LIMITED  
4623 BYRNE ROAD, BURNABY, B.C.

On 1993 February 26, an amended Permit was issued by the G.V.R.D. to Ticor Technology Limited. The said Permit authorizes Ticor Technology Limited to conduct a 20 hour trial burn for each material noted in their permit amendment application subject to the following conditions:

1. Submitting a trial burn plan to the G.V.R.D. and securing a written approval from the G.V.R.D. Air Quality Director on the proposed trial burn plan; and
2. Further processing of similar materials is prohibited until results of the trial burn have been reviewed by the G.V.R.D. and further written approval has been granted by the G.V.R.D. Air Quality Director.

Due to the potential public health impacts of Ticor's operation on the surrounding area, we would appreciate receiving written confirmation from your office that the amended Permit only authorizes Ticor Technology Limited to conduct a trial burn and that Ticor Technology Limited must file a full application with your office in order to engage in any further processing of similar materials which would then involve a public review and appeal process.

Yours truly,

Tim Shum, B.Sc., C.P.H.I.(C), F.B.A., M.H.S.A.  
 CHIEF ENVIRONMENTAL HEALTH OFFICER  
 ENVIRONMENTAL HEALTH SERVICES

TS:js  
 Enclosure  
 cc: ( ) Dr. A. King  
 MEDICAL HEALTH OFFICER



Greater Vancouver Regional District  
4330 Kingsway, Burnaby, British Columbia, Canada V5H 4G8

ATTACHMENT #3  
General  
Telephone (604) 432-6200  
Fax (604) 432-6251

Air Quality and Source Control Department - Tel (604) 436-6700 Fax (604) 436-6707  
Located at: 4720 Kingsway, Burnaby, B.C.

June 4, 1993

File: 632.2.383

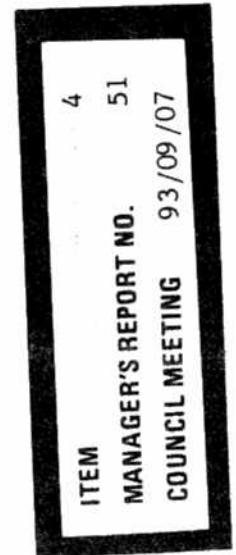
Environmental Health Department  
City of Burnaby  
6161 Deer Lake Ave.  
Burnaby, B.C.  
V5H 4N2

RECEIVED

JUN 07 1993

Environmental Health Services

Attention: Mr. Tim Shum, Chief Environmental Health Officer



**Re: Philip Environmental Services; Ticor Division, Bylaw Permit GVA0383**

Dear Mr. Shum:

Thank you for your letter dated May 11, 1993 regarding the terms and conditions of the Philip Environmental Services; Ticor Division Bylaw Permit GVA0383.

To provide you with some background on this issue, Mr. Kurt Knabe, General Manager of Philip's Ticor Division, submitted Permit amendment forms dated December 20, 1991 and June 26, 1992 requesting authorization to emit air contaminants from a Special Waste facility which would allow them to thermally treat a number of waste streams in addition to their paint sludge in the rotary kiln. The additional waste streams identified included waste ink, oil and fuel filter media, paint resin and hydrocarbon contaminated soils. In addition to publishing of the Permit amendment applications, Ticor were required to serve all neighbouring businesses and tenants with a copy of the June 26, 1992 application. Public comment received regarding the application, as well as a review of the results from a dispersion modelling study conducted by Ticor, were considered in formulating the restrictions and conditions placed in the amended Permit. This was in addition to monitoring and reporting requirements associated with thermal treatment facilities which are identified in the Special Waste Regulation. The amended Air Quality Management Bylaw Permit was subsequently issued to Philip Environmental Services, Ticor Division on January 26, 1993.

Schedule G in their current Permit stipulates that Philip's are restricted to a total of 20 hours of processing of each of the identified waste streams prior to successful completion of the monitoring



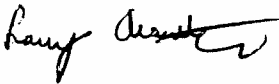
program detailed in Schedule C. Successful completion of the demonstration trial would be determined by the Air Quality Director and would involve a review of a number of factors which include the analysis of the feedstock, the feed rate and combustion conditions during the trial as well as compliance with the authorized contaminant discharge criteria detailed in Schedule E of their Permit.

Upon completion of this review, together with a letter of intent from Philip's regarding their continued interest in treating the waste stream, the Air Quality Director can authorize the conditions under which such treatment may continue. The options available to the Air Quality Director include the issuance of a short term Authorization or granting authorization by amending the relevant sections in their Bylaw Permit. Ticor is not required to file a formal application for an Authorization or Permit amendment since they clearly identified the waste streams in their earlier formal applications.

For your information, Ticor have recently completed the demonstration trials for ink waste and MEA filters and have submitted the results for our review. Ticor are currently awaiting formal authorization from the Air Quality Director to continue to treat these wastes. To date, Ticor have not proposed demonstration trials for the remaining wastes identified in their Permit which include, oil filters, paint resin and hydrocarbon contaminated soils.

A copy of Philip's Bylaw Permit is enclosed for your records. If you have any further questions or comments regarding any of these matters, please contact me at 436-6889.

Yours truly,



Larry Avanthay  
Officer, Air Quality Control Division

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