

ALBERTA
INFORMATION AND PRIVACY COMMISSIONER

Report on Investigation into Missing Computer Tapes and Microfiches

April 22, 2005

Alberta Pensions Administration Corporation
(Investigation #3248)

Investigation Report F2005-IR-002

I. INTRODUCTION

[1] On March 11, 2005, the Alberta Pensions Administration Corporation ("the APA") notified the Commissioner's Office that four computer tape cartridges and two microfiches containing information of pension plan members were missing.

[2] In response to the information provided by the APA, the Commissioner initiated an investigation on his own motion under section 53(1)(a) of the Freedom of Information and Protection of Privacy Act ("the FOIP Act"). Section 53(1)(a) of the FOIP Act authorizes the Commissioner to conduct investigations to ensure compliance with any provision of the FOIP Act.

[3] The Commissioner's Office was also notified by Alberta Health and Wellness on March 11, 2005 about the loss of a computer tape containing health information. The investigation authorized by the Commissioner under the Health Information Act on the missing health information will be addressed in a separate report.

II. INFORMATION AT ISSUE

[4] The missing computer tapes and microfiches are:

- Two magnetic computer tapes containing images of pension refund cheques issued by the APA. The total number of cheques on the tapes is 102, of which 44 were issued to individuals directly, 54 issued to financial institutions on behalf of named individuals, and 4 were issued to institutions.
- Two magnetic computer tapes containing the corresponding cheque registers.
- The microfiches for one of the pension refund cheques tape and its corresponding cheque register.

[5] The APA says the total number of individuals whose information was on the computer tapes and microfiches is 77. The reason for the difference in the number of cheques contained on the computer tapes and number of affected individuals is that some individuals received two cheques.

[6] The information contained in the missing computer tapes and the microfiches consists of the individual's name, address, the refund amount, the financial institution and the name of the pension plan. The computer tapes and microfiches do not contain the individual's bank account number, Social Insurance Number or pension member identification number.

III. INVESTIGATION FINDINGS

A. General

[7] IBM Canada Ltd. ("IBM") has a contract with the Alberta Government Integrated Management Information System ("IMAGIS") to provide the Government of Alberta with application support, payment production and other IT functions in relation to financial, purchasing, human resources and payroll activities. IMAGIS is under the ministry of Restructuring and Government Efficiency ("RGE").

[8] The IMAGIS contract is the overarching agreement between IBM and the Alberta Government. Encompassed within the IMAGIS contract are various individual services such as the Standalone Cheque Writer service.

[9] As a user of the Standalone Cheque Writer service, the APA has its pension refund cheques printed by IBM. This service is authorized by a "Change Order Implementation" document.

[10] IBM uses a private sector microfiche vendor to produce microfiches of the pension refund cheques and the cheque registers for the APA.

B. Application of the Freedom of Information and Protection of Privacy Act

[11] The FOIP Act places a duty on public bodies to protect personal information against such risks as unauthorized access, collection, use and disclosure (section 38 of the FOIP Act).

[12] The APA and RGE are public bodies subject to the FOIP Act. IBM and the microfiche vendor are private sector organizations and are not public bodies under the FOIP Act.

[13] Section 1(e) of the FOIP Act reads:

1 In this Act,

(e) "employee", in relation to a public body, includes a person who performs a service for the public body as an appointee, volunteer or student or under a contract or agency relationship with the public body

[14] Under the FOIP Act, IBM is considered an "employee" of the APA and RGE in relation to the services it is contracted to perform. However, the microfiche vendor has a contractual relationship with IBM, not with the APA or RGE. Therefore, the microfiche vendor is not an "employee" of the APA or RGE under the FOIP Act.

[15] The FOIP Act does not give the Commissioner jurisdiction over employees except through a public body. Therefore, the Commissioner opened this investigation against the APA.

[16] The investigation conducted by the Commissioner's Office included meetings and interviews with representatives from IBM, the microfiche vendor, the APA and IMAGIS. The investigation also included site visits to IBM Calgary, IBM Edmonton and the microfiche vendor. All parties cooperated fully with this Office's investigation.

C. The Microfiche Process

[17] IBM manages its IMAGIS mainframe equipment and tapes from its Calgary datacenter. To produce microfiches for the APA, IBM Calgary writes the pension refund information onto computer tapes after each payment run. There are two computer tapes produced: the first contains the images of each pension refund cheque printed for APA and the second contains the cheque register.

[18] The computer tapes are then delivered by a private sector courier to the microfiche vendor in Edmonton. After creating the microfiches, the microfiche vendor delivers the microfiches to IBM Edmonton for storage and retention. The computer tapes are returned by courier to IBM Calgary for future reuse.

D. Chronology of Events

[19] On December 21, 2004, IBM Calgary sent a computer tape containing the images of 84 pension refund cheques and a computer tape of its corresponding cheque register ("the first set of tapes") by courier to the microfiche vendor.

[20] The first set of tapes was received by the microfiche vendor on December 22, 2004. The microfiche vendor produced the microfiches and hand-delivered the microfiches to IBM Edmonton that same day. IBM Edmonton confirms it has the microfiches for the first set of tapes.

[21] December 22, 2004 was the microfiche vendor's last day at work before leaving for vacation. The microfiche vendor said the first set of tapes was placed on a table at the workplace for return to IBM Calgary at a later date. The microfiche vendor had arranged for an individual ("the Vendor's Back-Up") to cover the business operations during the vendor's absence.

[22] On December 23, 2004, the Vendor's Back-Up received a second set of tapes from IBM Calgary. The second set consisted of a computer tape containing the images of 18 pension refund cheques and a computer tape of its corresponding cheque register. The Vendor's Back-Up says the microfiches were produced and hand-delivered to IBM Edmonton that same day, along with the second set of tapes.

[23] The microfiche vendor says the first set of tapes was returned to IBM Calgary in January 2005 upon the vendor's return from vacation.

[24] The pension refund computer tapes have a lifecycle of approximately 30 days. After the computer tapes are created, processed for microfiche and returned to IBM Calgary, the computer tapes are reused.

[25] On January 21, 2005, the IBM's automated tape library management system identified the two sets of computer tapes for reuse. IBM discovered that the computer tapes were not in its tape library. In searching for the missing computer tapes, IBM found that the microfiches for the second set of tapes were also missing.

[26] IBM then initiated an internal investigation which included communication and interviews with the microfiche vendor and the Vendor's Back-Up, contact with the private sector courier, and physical searches of the IBM Calgary and Edmonton facilities. IBM also contacted the other clients of the microfiche vendor to determine whether the computer tapes and microfiches were sent to them in error.

[27] After its internal investigation failed to locate the missing computer tapes and microfiches, IBM notified IMAGIS on March 4, 2005 about this matter. IMAGIS then notified APA of the missing data on March 9th, 2005.

[28] On March 11, 2005, on its own initiative, IBM implemented changes to track the movement of computer tapes and microfiches between IBM and the microfiche vendor.

[29] At the direction of IMAGIS, the movement of computer tapes between IBM and the microfiche vendor was suspended on March 17, 2005 pending a microfiche needs assessment to determine whether microfiches were required.

E. Findings

[30] This investigation found the following.

1. No tracking of the shipment of computer tapes between IBM and the microfiche vendor

[31] IBM Calgary sends computer tape cartridges in plastic containers or bubble-wrapped envelopes to the microfiche vendor via courier. IBM Calgary includes a computer printout listing of the computer tapes in the package that is sent to the microfiche vendor.

[32] IBM says the timing of the return of the computer tapes to IBM Calgary is at the discretion of the microfiche vendor. When the microfiche vendor feels a sufficient number of computer tape cartridges have been compiled to fill a plastic container, the computer tapes are returned to IBM Calgary via courier. The microfiche vendor does not include a listing of the specific computer tapes in the plastic container. The courier slip confirms a package was picked up and delivered but not the contents of the package.

[33] Upon receipt of a shipment, IBM Calgary returns computer tapes to its tape library. There is no verification with the microfiche vendor as to what computer tapes have been returned in any one package.

[34] IBM says its internal investigation of this incident identified the need for better controls in tracking the shipment of the individual computer tapes. Therefore, on its own initiative and prior to meeting with this Office, IBM changed the computer tape movement process as follows:

- IBM Calgary continues to include a computer printout listing of the computer tapes in the package that is sent to the microfiche vendor. In addition, IBM Calgary sends an email message to the microfiche vendor that a package is being sent. The email message also contains the courier waybill number, the number of computer tapes being sent and a listing of each of the computer tapes.
- The microfiche vendor is required to send an email reply to IBM Calgary confirming receipt of the tapes.

- When returning the computer tapes to IBM Calgary, the microfiche vendor is required to send an email to IBM Calgary stating which computer tapes are being returned, the number of containers being returned and the courier waybill number.
- Upon receipt of the package from the courier, IBM Calgary verifies the contents of the package with the information provided by the microfiche vendor to ensure that all computer tapes are accounted.
- IBM Calgary will conduct a weekly accounting of all outstanding computer tapes. This will enable IBM to identify unaccounted computer tapes prior to when the computer tape is due for reuse (which may be 30 or 60 days dependent upon the established schedules).

2. No tracking of the delivery and receipt of microfiches

[35] The microfiche vendor delivers the microfiches in person to the mailroom of IBM Edmonton. The microfiche vendor's practice is to place the microfiches in fiche envelopes, which are wrapped with a transmittal slip that lists the computer tapes. The package is given to a mailroom person, not left in a mail basket. This is a longstanding arrangement. IBM does not document its receipt of the microfiches.

[36] The Vendor's Back-Up said the second set of tapes was received the morning of December 23, 2004. The processing of the microfiches took less than 5 minutes. The Vendor's Back-Up claims the microfiches for the second set of tapes were hand-delivered to the mailroom of IBM Edmonton shortly after lunch that same day.

[37] The Vendor's Back-Up says the microfiches were placed in a bubble-wrapped envelope, which is different from the microfiche vendor's practice. The Vendor's Back-Up did not realize that while the microfiches go to IBM Edmonton, the tapes are supposed to go to IBM Calgary. The Vendor's Back-Up says the tapes were placed into the envelope with the microfiches and that the envelope was hand-delivered to a person at the IBM Edmonton mailroom. The Vendor's Back-Up said the mailroom person was told that the envelope contained microfiches.

[38] IBM Edmonton says it has no record of receiving the envelope containing the second set of tapes and its corresponding microfiches. The mailroom person identified by the Vendor's Back-Up did not recall seeing the Vendor's Back-Up that day or receiving the envelope. Further, IBM says its practice is to not accept packages that are addressed to individuals not working for IBM. The Vendor's Back-Up had addressed the envelope to an individual who no longer worked with IBM. The Vendor's Back-Up said the name was obtained from the files of the microfiche vendor and did not realize the information was dated.

[39] The Vendor's Back-Up could not provide any evidence to support the claim that the microfiches and the second set of computer tapes were delivered to IBM Edmonton on December 23, 2004. However, IBM Edmonton could not provide any evidence that the Vendor's Back-Up did not deliver the package as claimed.

[40] As a result of this incident, IBM advised this Office that it has implemented the following actions to track the delivery and receipt of microfiches:

- IBM Calgary sends an email message to IBM Edmonton notifying them that a package has been sent for microfiche processing and that a delivery of microfiches should be expected within a day or two.
- IBM Edmonton will sign and date the receipt of any microfiches delivered. A copy of the signed receipt would be retained by IBM and a copy would be given to the microfiche vendor.

3. Source of missing computer tapes and microfiches difficult to determine

[41] IBM has the microfiches of the first set of computer tapes. This confirms that the first set of computer tapes were sent by IBM Calgary to the microfiche vendor, the information was converted to microfiches and delivered to IBM Edmonton.

[42] The microfiche vendor believes the first computer tapes were returned to IBM Calgary on January 12, 2005, along with other computer tapes. As the microfiche vendor did not record which computer tapes were in the shipment, this fact is based on the microfiche vendor's memory. Therefore, the microfiche vendor is unable to provide any evidence to substantiate that the first set of computer tapes were returned to IBM Calgary.

[43] IBM says all computer tapes that the microfiche vendor claimed were in that shipment are accounted for except the two missing pension refund tapes. However, since IBM Calgary (at that time) did not reconcile what computer tapes were actually returned, there is no evidence that the first set of computer tapes was not in the shipment.

[44] The Vendor's Back-Up does not dispute receipt of the second set of computer tapes. The microfiche vendor provided this Office with a copy of a statement used for billing purposes which lists the second set of tapes and its corresponding microfiches. This confirms the second set of tapes was received by the Vendor's Back-Up and would suggest that the microfiches were produced.

[45] However, as stated earlier in this report, neither the Vendor's Back-Up nor IBM can provide any evidence to substantiate whether the microfiches and the second set of computer tapes were or were not delivered to IBM Edmonton.

[46] In summary, it cannot be determined with certainty where the missing tapes or microfiches were lost. IBM advised that it contacted the other clients of the microfiche vendor to check whether the tapes or microfiches had been sent to them in error. The clients searched their respective facilities and reported back to IBM that they did not have the missing tapes or microfiches.

4. The microfiche requirement by APA needs to be clarified

[47] IBM says the microfiche process for pension refund cheques pre-dates IBM's contract with the Government of Alberta. The microfiche vendor had been creating microfiches for the Alberta Government since the 1970's. IBM said it inherited the microfiche process and that IBM continued the relationship with the microfiche vendor for the microfiche processing.

[48] The IMAGIS contract and the Change Order Implementation document contain no specific references to the production of microfiches. Both IBM and IMAGIS say the production of microfiches of the pension refund cheques is a practice that had always been done and was simply a continuation of a longstanding practice.

[49] IBM questions whether there is a need for the microfiches of the pension refund cheques since it can recreate the information from its database if required.

[50] IMAGIS also stated they were uncertain whether there is a need for the microfiches and therefore a microfiche needs assessment will be conducted.

[51] The APA says they were unaware that microfiches of pension refund cheques issued by the APA and the cheque registers were produced as part of the cheque printing services. APA says there is a need for microfiches of signed cheques to prove that payments had been made but not the issued cheques. Therefore, APA would need to clarify with IMAGIS and IBM its microfiche requirements.

IV. CONCLUSIONS AND RECOMMENDATIONS

[52] The investigation concludes:

- Whether the microfiche vendor or IBM lost the missing computer tapes and microfiches, IBM bears the responsibility of the loss since it is contracted to

provide the service to APA under the IMAGIS contract and the Change Order Implementation document. IBM is also responsible for the actions of the microfiche vendor given the contractual relationship between IBM and the microfiche vendor.

- The changes implemented by IBM to date will ensure better controls over the tracking and accounting of computer tapes and microfiches. These changes will minimize the risk of recurrences of missing computer tapes and microfiches. IBM is continuing its own internal investigation into this matter which may result in further changes. The microfiche vendor supports the changes implemented by IBM.
- The risk of unauthorized access, use or disclosure of information contained in the microfiches is a possibility. Microfiche readers are readily available. In addition, microfiches may be read through magnifying glass or microscopes. APA says the missing microfiches of the second set of tapes contain information of 15 individuals. Note: the risk of unauthorized access, use or disclosure of information contained in the missing computer tapes will be addressed in the separate investigation report on the missing health information.
- The limited amount of personal information in the tapes and microfiches reduces the potential risk of fraud or identity theft.

As stated earlier in this report, the missing information consists of an individual's name, address, the refund amount, the name of the financial institution and the name of the pension plan. The missing information does not include an individual's bank account number, Social Insurance Number or pension member identification number.

[53] We recommend that:

- The APA review with IMAGIS and IBM its microfiche requirements, the arrangements to protect personal information, and the issue regarding the retention and storage of its microfiches.

The APA was not aware that microfiches were produced for its issued cheques and cheque registers and that the microfiche processing was performed by a private sector microfiche vendor. The APA says it is reviewing its information flows and information management processes as a result of this incident.

- IMAGIS, the APA and IBM clarify the expectations regarding timelines for notification of privacy breaches.

The IMAGIS contract requires that each party “shall notify the other promptly if it becomes aware or has reasonable grounds to suspect that, unauthorized disclosure of the other party’s confidential information has occurred...”.

IBM discovered that the computer tapes and the microfiches were missing in January 2005. However, IMAGIS and APA were not notified until March 2005. While IBM needed to conduct a search to ensure that the tapes and microfiches were not misplaced, earlier notification to IMAGIS and APA would not prevent IBM from continuing with its search and internal investigation.

[54] The APA has written to all affected individuals advising them about the incident. The individuals are encouraged to contact the APA if they have any concerns or questions.

[55] This case is now closed.

Submitted by,

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