## SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT:

Transcontinental Printing 2003 Inc.

PROPOSAL NAME:

Magazine manufacturing Facility

CLASS OF DEVELOPMENT:

Class 1

TYPE OF DEVELOPMENT:

Manufacturing

CLIENT FILE NO.:

5082.00

### **OVERVIEW:**

On January 13, 2005, the Department received a Proposal from Transcontinental Printing 2003 Inc. for the continued operation of a magazine manufacturing facility at 737 Moray Street in Winnipeg.

On January 31, 2005 the Department placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station), the St James-Assiniboia Public Library, and the Manitoba Eco-Network. As well, copies of the Proposal were provided to the Technical Advisory Committee (TAC) members. The Department placed a public notification of the Proposal in the Winnipeg Free Press on February 5, 2005. The newspaper and TAC notification invited responses until March 10, 2005.

# **COMMENTS FROM THE PUBLIC:**

No comments or concerns were received from the public

### COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Historic Resources - No concerns.

<u>Industry Economic Development Mines, Petroleum Branch</u> - No comments.

Transportation and Government Services - No concerns.

<u>Health</u> – Noted that any potential impacts on air quality in the area be considered and clarified, any potential impacts on water quality or water safety be identified and addressed, any potential affects to the surrounding land and population as pertains to odours or noise be addressed and that an emergency plan to ensure the safety of the population in the area be developed and implemented if there are potential hazardous materials utilized in the operations of the facility.

**Disposition.** The Environment Act Licence will address the relevant applicable items.

Intergovernmental Affairs - No concerns.

Agriculture, Food and Rural Initiatives - No concerns.

## Conservation had the following concerns/comments:

- 1. Section 3 EXISTING LAND USE AND ADJOINING LAND, it should be noted that there are office complexes on the adjoining properties from which the Department has received complaints regarding odours from this facility.
- Section 6 DESCRIPTION OF PROPOSED DEVELOPMENT –
  OPERATIONS hazardous chemical storage must comply with: National
  Fire Code of Canada (1995), Manitoba Regulation 188/2001, The Dangerous
  Goods Handling and Transportation Act and Regulations as well as the Office
  of the Fire Commissioner Province of Manitoba.
- 3. Section 8 POTENTIAL IMPACTS A. EMISSION OF PARTICULATE AND ORGANIC VAPORS TO AIR Printing Press manufactures rated efficiency of the afterburner is 90%, type and concentration of compounds likely to be released should be identified. Consideration should be given to fugitive emissions of compounds from the printing area as well as the binding/packaging process.
- 4. Section 8 POTENTIAL IMPACTS b) Solid Waste Emissions Printing Cleaning solvents disposal/recycle of the bulk barrels is not indicted. Spillage is the sump pit referred to located in the hazardous chemical storage area, are there other sump pits within the facility for the purpose of spill containment. Binding/Packaging Printing ink what type of solution is used to flush residue into hazardous waste container. If residue is collected as hazardous waste disposal by giving away or disposal at landfill is questioned.
- 5. Section 8 POTENTIAL IMPACTS c) Hazardous Waste –the disposal of the materials listed is indicated as sent to a land fill site, under Section 9 ENVIRONMENTAL MANAGEMENT PRACTICES Part D it is indicated that these materials are sent to Waste Management for disposal, clarification is required.
- 6. Section 10 CHEMICAL CONSUMPTION CHEMICALS UTILIZED IN PRINTING PRESS Metering Roller Cleaner MSDS for this product supplied to the Department August 7, 2002 indicates that this product contains methylene chloride, a suspected carcinogen. Is the same product still used or is an alternative now used that does not contain methylene chloride. Not all MSDS sheets for the chemicals listed have been attached.
- 7. Section 10 CHEMICAL CONSUMPTION INK CONSUMPTION the quantity reported for the year 2000 is different from the quantity reported in correspondence from Graham Moore to L. Strachan, dated September 24, 2002, i.e. 134,100 kilos, clarification is required.
- 8. Although the sources of air emissions are identified in the proposal no information has been provided on the identity of the pollutants, the quantities released or the resulting ambient levels in the surrounding area. To estimate the resulting air pollutant levels air dispersion modeling of the emission is required.
- 9. Apparently complaints have been received from the surrounding businesses as a result of bypassing the afterburner. It is recommended that this practice not be allowed to continue.

- 10. Standard odour clauses should be included in the Environment Act licence.
- 11. A dust collector baghouse is identified in the proposal. What source does this baghouse control and what is its collection efficiency.
- 12. A pad was constructed onsite in December 2004 for an incinerator. No information on this incinerator was provided in the proposal.
- 13. The three printing presses are named Hantscho MK 16 and IV and (future) Harris 400B. The proposal diagram of the floor plan however shows the Web 16, the M-400 and a Web 84. Are the Web 84 and the Hantscho IV the same? Or where is the IV press?

These comments were forwarded to the proponent and the following replies were received:

#### 1. No comment

- 2. Our Hazardous Storage facility does comply with the National Fire Code. The quantity in which we handle and store our oils and inks do not apply to Manitoba Regulation 188/2000. We meet the requirements of the Dangerous Goods Handling and Transportation Act and our staff are trained accordingly. The Office of the Fire Commissioner Province of Manitoba has adopted the National Fire Code with Manitoba amendments. These amendments were reviewed and are not applicable to LGM.
- 3. Compounds released if not converted by the afterburner would be: petroleum based solvents, and very small amounts if Linseed Oil, Soya Oil and No-melt grease. Assuming annual ink usage of 135, 000 kg, an average afterburner conversion rate of 95%, VOC retention of 20% and a VOC solvent content of approx. 36% by weight there would be approximately 0.26 kg of solvent released per hour. Fugitive emissions have already been addressed by installing extraction units for all major sources. General ventilation upgrade needed as a result of the new press is being addressed by the installation of a new heat reclaim and ventilation unit which will bring an additional 26, 000 cfm of air into the building. This will meet ASHRAE standards.
- 4. The disposal of empty cleaning solvent bulk barrels is by United Chemical. They do take them empty but in most cases we use them for disposal of waste oil/water mix and United Chemical will remove and dispose of these barrels. There are two sump pits attached to two of the presses, these will collect fluid leaks or spills from the presses. They are pumped out as required into used barrels and these barrels are removed by United Chemical. The solvent used to clean the inkjet printer in the bindery area is a Video jet product that is 3% 1-Butanol, 7% Ethanol and 90% Butanone. The containers are small 4 litre containers for both the ink and the solvent. 10-12 ink containers are used per year. All ink residue is flushed into large barrels and removed by United Chemical.

- 5. The empty containers, paper dust and Hepa filters are removed by Waste Management Inc. and disposed of at a landfill site.
- 6. The Metering Roller Cleaner used is Saphira FH-7001B, which contains 70-90% aliphatic hydrocarbon and 10-20 % heptane. Neither of these is listed on any of the carcinogens lists –IRC1; IRC2; IRC3; NTP; or OSHA.
- 7. The variance between the ink consumption figures for 2000, 131, 100 kg in the proposal vs 134 000 kg reported in the letter of September 24<sup>th</sup> 2002 can only be attributed to a typing error. All numbers came from the same source and have been verified by Sun Chemical, our ink supplier.
- 8. Air emissions are from the three afterburners or oxidizers. These afterburners process the solvents released from the inks during the drying process. Solvents (VOCs) contained in these inks are listed on the attached sheet from Hostmann-Steinberg. The afterburners reduce the VOCs to carbon dioxide and water with an efficiency of 90-95%.
- 9. No comment.
- 10. No comment.
- 11. The dust collector baghouse is in two parts; one part consists of 36 bags which act as a filter to the air from the cyclone unit before it is returned to the plant. The cyclone unit processes paper trimmings from the presses and bindery machines. When these bags get dirty they are washed by Canadian Linen and replaced. The second part consists of 4 bags which collect paper cuttings from the perfect binder machine. These bags fill up with the paper cuttings and are emptied into the garbage container and sent to landfill. The volume is approximately 30 cu. ft. of cuttings every two weeks.
- 12. The pad constructed in December was for the new afterburner. The new afterburner is a Meg-Tec HXC-II. The afterburner operations are for that unit. The new afterburner unit does not have a by-pass damper. There are 3 afterburners, one for each press. They all perform in the same manner as the new unit.
- 13. The Web 84 and the Hantscho IV are the same press.

**Disposition.** The Environment Act Licence will address the relevant applicable items.

## Canadian Environmental Assessment Agency

The application of the Canadian Environmental Assessment Act with respect to this proposal will not be required.

# **PUBLIC HEARING:**

A public hearing is not required.

# **RECOMMENDATION:**

The Applicant should be issued a Licence, in accordance with the attached draft, to operate the magazine manufacturing facility. Enforcement of the Licence should be assigned to the Red River Region.

### PREPARED BY:

Adrian Jackson, P. Eng. Environmental Engineer Municipal, Industrial and Hazardous Waste Section March 14, 2006 Telephone: (204) 945-7108

Fax: (204) 945-5229

E-mail Address: ajackson@gov.mb.ca