OVERVIEW:

On May 12, 2000, the Department received a Proposal from Becker Acroma Inc. to develop and operate a manufacturing and industrial plant consisting of a paint storage warehouse, a small laboratory and an office to be located at unit 4 – 1725 St. James Street in the City of Winnipeg. The development will consist of a new 6000 sq. ft. warehouse for the storage of paint and paint related products which will be contained in 205 litre drums and 20 litre pails, a small area where paints may be mixed and repackaged, a small laboratory and an office area.

On May 23, 2000 the Department placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station), the Centennial 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 May 27, 2000. The newspaper and TAC notification invited responses until June 19, 2000.

COMMENTS FROM THE PUBLIC:

No comments were received from the public.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Highways - No concerns.

Natural Resources had the following comment:
In this area, during a heavy rainfall, the domestic sewers may flow directly into the Red River. Care should therefore be taken to ensure that any spills are contained within the building and not allowed to enter the city sewer.

Disposition:
These concerns were forwarded to the Proponent and the response was as follows:- All floor drains within the spill curb in the facility will be capped off.
Historic Resources - No concerns.

Environment-Air Quality Management had the following comments:-

Question No. 8: The paint booth is said to disperse a "very limited quantity of highly filtered fumes approximately 30 feet high from the roofline".

a) What processes are occurring in the paint booth? Are paints just being mixed or is actual spraying of paints occurring?
b) What chemicals are being released, in what quantities, and how frequently?
c) What air pollution controls are in place (i.e., what is meant by "highly filtered")?
d) How close are the nearest air intakes on the building (either for Acroma or neighbouring tenants)? According to the fax from Peter Gryc, the air make-up units for Becker Acroma Inc. will be located either "on roof or hung at high level".
e) How close is the nearest residence to this facility?

Disposition:
These comments were forwarded to the Proponent and the response was as follows:-

a) The paint booth will be a small tabletop one; approximately 4 ft x 4 ft face area, and will be used for spraying paint samples. This will involve very intermittent spraying of minimal paint quantities (on an average a half gallon a day.) The exhaust air will be filtered through a paint-arrestor filter, and then will be discharged vertically up to form a plume above the building envelope, thus preventing recirculation of contaminated air into adjacent air intakes, which are about 18 ft away.

b) The chemicals that will be removed by the ventilation system are commercial paint and solvent vapours released either during decanting and mixing, or during spraying of paint samples. These vapours will not contain highly toxic isocyanide which is often present in automotive coating products. As said above, the quantities are limited to vapours volumes equal to vaporizing a half gallon of paints/solvents a day.

c) Air pollution control includes dilution ventilation to create a safe environment for people inside the facility, plus paint arrestor filter in the paint booth. On the outside the exhausted air will be discharged in a manner to be diluted with ambient air. This is not very different from automotive paint booth exhaust, except that quantities of chemicals used are much lower.

d) As stated above, the adjacent air intakes will be located approximately 18 ft away from the discharge points of our fans. However, the discharge air stream will be directed vertically up to disperse above the building envelope far away from air intakes.

e) The nearest residential occupancy is located approximately 800 ft away on the north side of Notre Dame Avenue.
Environment-Operations Division, Winnipeg Region had the following comments:

1. The proposal provides very few details, so few in fact that it is difficult to properly assess what impacts this proposed facility may have, especially on adjacent tenants. There are no details as to any other tenants that might be located in the same unit (strip mall), and other units on the same site. Are the other units in the same building to be under positive pressure to protect against fugitive releases from entering other tenants workspaces?
2. The material submitted appears to be based solely on National Fire Code requirements. There is no information on expected concentrations of paint fumes expected to be released to the atmosphere from either mixing areas or the spray booth. There is no indication (either way) of any emission suppression or control for the proposed facility.
3. Their does not appear to be any assessment of potential offsite impacts of emissions from this facility.
4. There is no information as to the composition of materials to be handled at this facility.
5. I suggest that the proposal be returned to the proponent so that a complete package can be assessed. This should include schematics of the complete mixing and transfer systems, manufacturer's recommendations for ventilation/control systems, and expected emission levels (volumes and concentrations).

Disposition:
These comments were forwarded to the Proponent and the response was as follows:-

1. Impact on adjacent tenant: the 3 roof exhausts fans will be discharging air into a high plume above roof level to prevent contamination of air intakes to this tenant and the adjacent tenant roof top units. The closest unit is located about 18 ft from exhaust fans. I am confident that no cross-contamination will occur. In terms of air exfiltration from Becker Acroma space to the adjacent spaces, firstly the Becker Acroma space will be under negative pressure, and secondly, the engineering design of ventilations such as to provide a safe environment for people working in the area.
2. The emission level in exhaust air stream is expected to be a maximum of 25% of lower exposure level, which for most cases for solvents is about 10 000 ppm i.e., about 2500 ppm. Becker Acroma will have an interlock to prevent spraying when the ventilation system is off.
3. I am not an environment expert, but what it is called an “off site impact of emission from the facility should be many times less significant than from an automotive body shop, many of which are scattered around the city.
4. The chemicals that will be removed by the ventilation system are commercial paint and solvent vapours released either during decanting and mixing, or during spraying of paint samples. These vapours will not contain highly toxic isocyanide which is often present in automotive coating products. As said above, the quantities are limited to vapours volumes equal to vaporizing a half gallon of paints/solvents a day.
5. A set of drawings has been forwarded to the Department for review.
Health had the following comments:
In response to question # 8, they note that it is anticipated that “the proponent will install a modest sized paint booth dispersing a very limited quantity of highly filtered fumes approximately 30 feet high from the roof line. This will be occasional and well within safe guidelines”.

In response to question # 9 they state that “typical venting in the warehouse will be installed by engineered specifications for the well being of all concerned in the leased premises”.

The paint spray booth is the only portion of the proposal about which I have specific health concerns. The map does not suggest that there is a populated area in the neighborhood of this particular property but that is not stated explicitly in the proposal. It is also not clear to me whether the type of filtration they are going to be utilizing will remove the volatile organic compounds which will presumably be generated or to what extent that will happen.

Finally the statement regarding typical venting for the well being of all concerned in the leased premises appears unnecessarily vague and I would appreciate clarification of that statement.

Disposition:
These comments were not forwarded to the Proponent as responses to other similar TAC comments have been received from the Proponent:

The nearest residential occupancy is located approximately 800 ft away on the north side of Notre Dame Avenue.

The paint booth will be a small tabletop one; approximately 4 ft x 4 ft face area, and will be used for spraying paint samples. This will involve very intermittent spraying of minimal paint quantities (on an average a half gallon a day.) The exhaust air will be filtered through a paint-arrestor filter, and then will be discharged vertically.

On the outside the exhausted air will be discharged in a manner to be diluted with ambient air.

Canadian Environmental Assessment Agency commented that 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 Proponent should be issued a Licence, in accordance with the attached draft, to operate the paint storage warehouse facility. Enforcement of the Licence should be assigned to the Winnipeg Region.

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