

December 4, 2008

Ms. Judy Lupton
Manager, Development and Business Licensing
Planning and Development
The City of Calgary
Box 2100, Stn M
Calgary, AB

DEC 05 2008

Via email: judy.lupton@calgary.ca

Dear Ms. Lupton:

**Re: LOC2007-0080/10C; 723, 803, 813, & 813R 24 Avenue SE (Ramsay
Exchange)
Residential – Industrial Interface Concern**

Alberta Health Services – Calgary Health Region (AHS) expressed concern in a previous letter dated April 22 2008 to The City of Calgary (the City), about a land **use incompatibility issue pertaining to the proposed Ramsay Exchange**, that includes a residential component. Lands to the north of the Exchange are zoned industrial.

In discussion with the City, it has become apparent that the Calgary Stampede organization may have plans to construct an animal facility immediately adjacent to the Ramsay Exchange in the next 10-15 years. The animal facility presents a potential residential-interface concern, with the high probability of public complaints to the City and AHS from odour emissions that are significant part of any animal operation. Also of concern, are emissions of aerosols (including bioaerosols), vapours, and gases from the facility.

However, AHS understands from The City that the barn will not have continuous animal occupancy throughout the year, which is a factor mitigating the land use conflict concern - *Clarity of the expected total days of animal occupancy over the course of the year, and if that occupancy will be primarily in the summer, would be helpful.*

Summer is the season of greatest concern in terms of maximum odour emissions from an animal facility, and has the potential to generate the maximum number of complaints from the public regarding offensive odours due to open windows and outdoor activities, including from outdoor restaurant patios.

Odours and other emissions of concern can be mitigated both at the barn and at the Ramsay Exchange building. Although the focus would of necessity have to be on the barn.

In terms of the animal facility, the following is a list of means for mitigating and abating emissions of odours, aerosols, gases and vapours. AHS would not, as a first step, recommend a risk assessment to assess this issue. Rather, AHS recommends incorporating a well considered and developed building design, operating practices and the implementation of emission control BATs (Best Available Technologies), as opposed to BAEFTs (Best Available Economical Feasible Technologies).

The Stampede Organization should be held to a very high standard to guarantee that emissions will not adversely affect residents or building occupants, either indoors or outdoors, through the creation of public health nuisance under the Public Health Act. A nuisance under the Act is defined as a condition that is or might become injurious to the public health, and, includes aesthetic nuisance odours or exposures with the potential to be infectious, allergic or toxic – all of which can affect well being.

- All animals will be offloaded from and uploaded into transport trucks, housed, and fed inside a fully enclosed and engineered building(s).
- All animals will not have access to or be allowed to enter into an open air corral of any kind regardless of the length of time.
- Manure and other waste will be stored, handled and managed at all times using a fully engineered system and contaminant and within a fully enclosed and engineered structure(s), with absolutely no open air storage of wastes of any kind for any duration of time. Storage facilities will be engineered to condition, treat and process the wastes to minimize as much as technically possible the generation and emission of odours, including other harmful emissions.
- Animal feed will be stored in a fully enclosed building(s).
- Barn operating practices will minimize the generation and emission of odours and other toxic emissions.
- Any and all air exhausting from or exiting from any building(s) with animals in it, or any building(s) associated with or used for manure storage, handling, transfer, including passive vents or openings, including those associated with the treatment or storage of wastes of any kind, will pass through emission control technologies to reduce emissions to an acceptable level such as not to cause odour or aerosol, chemical, gas, or vapour emissions that may impact the well being of adjoining residents and commercial tenants, whether inside or outside.
- Engineered emission control technologies will include, but not be limited to, acid gas / gas / organic vapour filters, aerosol filters, biofilters, thermal oxidizers. BAT rather than BAEFT will be applied to selection of emission control technologies.
- Trucks for the transport of any and all waste products will be fully enclosed and airtight. Waste transport trucks will not be permitted to temporarily line up and wait for entry into the building. The building must be designed to handle the size of trucks that are anticipated.

In terms of the Ramsay Exchange, the following is a list of the means for mitigating and abating the entry of odours, aerosols, gases and vapours emissions from the barn into the Ramsay Exchange building(s):

- Outdoor air, fresh air, make-up air, and combustion air used for heating, cooling, exhaust ventilation, general or local ventilation will be located on the opposite side of the building from the side the barn is located on.
- The building ventilation system will be designed and engineered to incorporate air cleaning filters for the removal of aerosols, gases, acid gases, reduced nitrogen and sulphur compounds, odours and other substances of concern emanating from the adjacent barn.
- In addition, the HVAC system will be designed and engineered to be able to operate in 100% recirculation mode, and capable of providing any required cooling or heating, with the complete exclusion of outdoor air.
- Exterior windows, doors, etc, will be engineered to a high degree of air-tightness to reduce as much as possible the infiltration of outdoor air into the building.

Prospective tenants into the building are to be advised that Calgary Stampede organization may be constructing, in 10 or 15 years, an animal facility adjacent to the Ramsay Exchange, and that the City will be applying design, emission and operational controls to mitigate, abate and manage the airborne emissions of concern from the facility, including odours. And, that the facility will only house animals on a temporary basis and the season when the facility will be used.

I hope this provides assistance to the City on this issue. Please contact me if you have any questions at 943-8049 or email dennis.stefani@albertahealthservices.ca

Yours truly,



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Coordinator, Risk Assessment and Management
Environmental Health

c. David Lee. Manager, Risk Assessment and Management