

## **SUMMARY OF COMMENTS/RECOMMENDATIONS**

**PROPONENT:** Town of Shoal Lake  
**PROPOSAL NAME:** Town of Shoal Lake Biosolids to Farmland  
**CLASS OF DEVELOPMENT:** 2  
**TYPE OF DEVELOPMENT:** Waste/Scrap  
**CLIENT FILE NO.:** 4535.00

### **OVERVIEW:**

On July 6, 2000, the Department received a Proposal from the Town of Shoal Lake for the removal of biosolids from its wastewater treatment lagoon located on the NW quarter of Section 4 - 17 - 23WPM in the Municipality of Shoal Lake. The biosolids will be removed from the lagoon, transported in enclosed tanks to farmland and injected into the soil. The 65 hectares of land on which the biosolids will be applied by injection are located within the SW quarter of 3 - 17 - 23WPM that is owned by Robert Peter Shwaluk.

The Department, on July 11, 2000, placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station), the Centennial Public Library, and the Town of Shoal Lake Office. As well, copies of the Proposal were provided to the Interdepartmental Planning Board and TAC members. The Department placed a public notification of the Proposal in the Shoal Lake Star on Saturday, July 15, 2000. The newspaper and TAC notification invited responses until August 14, 2000.

### **COMMENTS FROM THE PUBLIC:**

No comments were received from the Public.

### **COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:**

#### **Highways**

- No objection.
- *Comments/concerns include:*
  - *All trucks or hauling equipment comply with the regulations of the Highway Traffic Act.*
  - *Applicant must be responsible for all costs associated with any cleanup of Highway property caused by spillage during the transportation of the biosolids.*

#### Disposition:

- The Environment Act Licence contains clauses that cause the Licencee to utilize suitable transportation equipment and to be responsible to undertake appropriate action in the event of an incident.

### **Natural Resources**

- No objection.

### **Agriculture and Food**

- *Poorly drained potholes and sloughs which occur within Newdale Association soils should be avoided with some setback distance. This would reduce the acreage available.*
- *Is there a sufficient landbase to accommodate the application of all the bio-solids available. The application rate should be based on the soil test levels of plant available nutrients (generally nitrogen) relative to the needs of the crops to be grown. The present soil test results indicate a relatively high nitrate - nitrogen level which, presumably, will be lower following the production of this year's crop and a time when the sludge will be applied for next year's crop. The biosolid material is relatively high in nutrients particularly phosphorus therefore application rates may have to be relatively low and hence the requirements for a reasonably large land base. Higher application rates could be used if the biosolids were being applied to a perennial forage crop rather than an annual cereal or oilseed crop.*

### Disposition:

- The Environment Act Licence contains clauses which; cause the Licencee to apply the biosolids to areas within the designated area which are not subject to flooding, require that the biosolids remain the furrow opening and require that the surface expression of the injected biosolids is acceptable to an Environment Officer.
- The Environment Act Licence contains clauses which cause the Licencee to ensure that;
  - the application rate of biosolids onto the land does not exceed 15 tonnes per hectare, on a dry weight basis, and that the amount of plant-available nitrogen added to the land from all sources does not exceed 100 kilograms per hectare during any year in which biosolids were applied;
  - biosolids are not applied on land where, prior to the application of biosolids, the level of nitrate-nitrogen exceeds 100 kilograms per hectare in the upper 60 centimetres of the soil;
  - biosolids are not applied on land where, prior to the application of biosolids, the concentration of sodium bicarbonate extractable phosphorus, as P, exceeds 60 micrograms per gram in the upper 15 centimetres of the soil; and

- on all agricultural land onto which biosolids have been applied, one of the following crops is planted at the commencement of the next growing season following such application and only these crops are grown for a period of three years from the date of application of biosolids:
  - a) a cereal crop;
  - b) a forage crop;
  - c) an oil seed crop;
  - d) field peas; or
  - e) lentils.

### **Historic Resources**

- No concerns.

### **Rural Development**

- No land use concerns.
- *Comments/concerns include:*
  - *The application does not indicate setbacks from property lines, it does mention waterbodies with respect to the spreading (injection) of the biosolids.*

#### Disposition:

- Minimum setbacks from any occupied residence, residential area, waterways and groundwater wells are designated in the Licence.

### **Health**

- *Please ensure:*
  - *prevention of pollutants or contaminated wastewater from entering sewage disposal and municipal ditch systems;*
  - *odor control and monitoring;*
  - *gasoline and diesel regulations if applicable; and*
  - *irrigation onto non-vegetable crops.*

#### Disposition:

- The terms of the Licence require; injection of the biosolid into the soil, biosolids must remain in the furrow opening, and the surface expression of the injected biosolids is acceptable to an Environment Officer;
- The terms of the Licence will cause the Licencee to eliminate or to mitigate odour nuisances as the Director may require;
- The terms of the Licence require that the Licencee comply with applicable regulations for the storage and handling of gasoline and associated products and the reporting of environmental accidents; and
- The biosolids will be injected into the soil while only specific varieties of non-vegetable crops may be grown at this location for a period of three years following injection.

**Environment-Operations Division**

- No concerns.
- *Comments/concerns include:*
  - *The licencing terms and conditions that are routinely applied to this type of development should adequately address parameters of concern to Environmental Operations.*

**Environment-Water Quality Management**

- No concerns.

**Canadian Environmental Assessment Agency**

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

**PUBLIC HEARING:**

A public hearing is not recommended.

**RECOMMENDATION:**

The Proponent should be issued a Licence to remove biosolids from its wastewater lagoon for sub-surface injection on the described land location subject to the specifications, limits, terms and conditions of the Licence. The Licence should be assigned to the Park West Region.

PREPARED BY:

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