SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT:	**K T EnviroClean Inc.**
PROPOSAL NAME:	**Heat Cleaning Oven Facility**
CLASS OF DEVELOPMENT:	N/A
TYPE OF DEVELOPMENT:	**Hazardous Waste – DGH&T Act**
CLIENT FILE NO.:	**4521.00**

OVERVIEW:

On March 27, 2000, the Department received an Application from K T EnviroClean Inc to install and then operate a Guspro 606060 Heat Cleaning Oven. The Application was not complete and the Applicant was contacted and a more complete Application was received on April 28, 2000.

On May 4, 2000 the Department placed copies of the Application in the Public Registries located at 123 Main St. (Union Station), the Centennial Public Library, the Manitoba Eco-Network and the Selkirk Community Library. As well, copies of the Application were provided to the Technical Advisory Committee (TAC) members. The Department placed a public notification of the Application in the Selkirk Journal on May 8, 2000. The newspaper and TAC notification invited responses until June 5, 2000.

COMMENTS FROM THE PUBLIC:

Comments were received from the Miller Environmental Corporation The comments indicated that in Miller's opinion:

1. approval of this Application would negatively impact the market place and directly affect Miller;
2. the oven is in fact an incinerator and should meet the strict CCME incinerator guidelines;
3. the oven has insufficient residence time, there is no acid gas management, no particulate scrubbing and no stack analysis on stream;
4. a full scale Environmental Impact Assessment must be conducted to determine the impact on the local environment;
5. the building at 605 Mercy does not meet minimum standards for the storage of hazardous wastes;
6. the notice does not clearly represent the true purpose of the Application and should be withdrawn;
7. there is no emergency management or decommissioning plans.

Disposition:

These concerns were forwarded to the Applicant and the response was as follows:-

1. The oven is not an incinerator. The oven has an afterburner, which controls emissions.

...2

2. Residence time comes into consideration with incinerators not this oven. Acid gas management is controlled by the afterburner. Particulate scrubbing is not required. If the filters were made of Teflon or contained chlorine then a scrubber would be required. Stack analysis is not normally required, the use of an afterburner results in only CO_2 and waster being emitted.
3. There is no impact on the local environment, see above comments on emissions. Also see approval from the Canadian Environmental Assessment Agency.
4. What standards? The standards required for the oven operation are the building and fire codes, which in this case have been met. In the Application we have requested permission to store 50 drums of the spent filters. These filters are contained in drums and do not represent a danger in spillage or run off. The building is a concrete structure with a metal roof and is sprinklered.
5. We do not know how much more specific we can be. There is no underline purpose, we say what we mean.
6. The only emergency that can occur is if the oven malfunctions and it has all the necessary controls to shut down in all situations. In reference to decommissioning there would be no possible residues or contamination because everything is burnt in the oven. The ash residue has proven to be landfillable. The handling of the filters does not represent any possibility of spillage because all filters are dry.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Highways - No comment.

Natural Resources - No concerns.
Additional review June 5, 2000. Comments:-
1. any abandoned wells on the property should be located and properly sealed, The well head of any currently operating well should be properly protected from potential contamination,
2. plans and procedures should be developed for handling drums that may contain wet products and for handling and storage of waste ash that may not be accepted by the municipal landfill,
3. plans for containing spills while off loading, storing and handling the drums containing spent filters should be developed.

Disposition:
These concerns were forwarded to the Applicant and the response was as follows:-
1. There are no wells on the property. All water and sewage is provided by the City of Selkirk, Water and Wastewater Treatment plants.
2. All spray filters are dry and only wetted down; if we actually do this; at the time of processing, inside the oven as previously described. Any ash that cannot be disposed of at the municipal landfill will be labeled accordingly, with appropriate TDG labels and shipped to Miller Environmental for disposal.

...3

3. In terms of containing spills while offloading, storing and handling the drums of spent filters, there will be plans in place to handle any spill, however the filters are all dry so there is no danger of material running on floors.

Historic Resources - No concerns.

Conservation-Air Quality Management - had the following comments:-

a) Presumably there will be ash generated by the combustion of the paint filters. More details are required on how this ash will be captured by the oven (*i.e.* emission controls) and how it will be handled (*i.e.* removed from the oven, stored, transported, *etc.*).
b) The purpose of the unit is to burn paint filters. Since paint pigments generally contain heavy metals, what will happen to these heavy metals during the process? How will their release to the atmosphere be prevented or minimized?
c) In Section viii, the proposal states that "chlorides are specifically excluded from processing in this oven." How will the proponent ensure that the paint filters do not contain paints with chloride components?
d) The temperature and residence time for the oven are stated to be 788 to 870 ^{o}C and 0.75 to 1 second, respectively. The CCME guideline for municipal solid waste incinerators states that the minimum temperature and residence time should be 1000 ^{o}C and 1 second. For hazardous waste incinerators, which may be more appropriate for this situation, the CCME guideline is a minimum temperature and residence time of 1100 ^{o}C and 2 seconds, respectively. This unit doesn't meet either set of guidelines.

Disposition:

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

a) Ash will be captured at the bottom of the trays holding the filters during the burning process. This ash will be put in 45 gal drums and taken to the City of Winnipeg Brady Road landfill site. See leachate test done on ash residue from a sample of filters burnt at Guspro. Also see memo from the City of Winnipeg giving approval. As requested by the City of Winnipeg more tests will be done to monitor the leachates. Note that flammability is not a problem.
b) In the Application the representative stains and thinners did not indicate metals on the MSDS. However the analyses done on the ash residue from the test burning there are trace elements of some metals. Any metals in the overspray captured by the filters will not be emitted from the oven and remain in the ash. The trace metals in the ash passed leachate tests.
c) Firstly we do not know of any formulas that contain chlorides and secondly we will be capturing all MSDS from the customer whose filters we will be burning to confirm this. Our client will ensure that all existing and future MSDS will be forwarded to us.
d) This unit is not an incinerator, it is an oven. The oven has an afterburner which controls emissions.

...4

Conservation-Operations Division, Eastern-Interlake Region had the following comments:-

- Looking at point vii. in the Application section, they comment that "... the filters would be removed from the drums when they are to be processed and put into an open sided cage **and sprayed with water before entering the oven** ....". What happens to the runoff water and contaminants from the sprayed filters? Where does it flow to/into? (i.e. contained where?).
- The last point in viii. mentions that no released pollutants would have any impacts on surface water... but details are a bit vague here.

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

- In our application we should have been more specific on this count. Firstly the need to spray (only a very light mist) is not necessary, we are proposing to do this only to improve or make the burning process more efficient. In using only a light mist there would be no run off, also the bottom of the cage has a solid bottom and probably a six inch solid side at the lower edges. Any water would be captured in the tray. The filters would be sprayed inside the oven before burning so if by chance there was some overspray it would be inside the oven and burnt accordingly. It is possible that we may find that we do not need to use the water spray.
- Prior to processing the filters are in a solid form and contained in drums. They would be transferred from the drum into trays inside the oven. No pollutants would come in contact with surface water. During the process, as stated before the emissions would be CO_2 and water, so no pollutants will contact surface water.

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 Heat Clean Oven facility. Enforcement of the Licence should be assigned to the Eastern/Interlake Region.

PREPARED BY:

Adrian Jackson, P. Eng.
Environmental Engineer
Municipal Industrial Hazardous Waste Approvals
July 5, 2000

Telephone: (204) 945-7108
Fax: (204) 945-5229
E-mail Address: ajackson@gov.mb.ca