

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: HAZCO ENVIRONMENTAL SERVICES

PROPOSAL NAME: Waste Transfer Facility

CLASS OF DEVELOPMENT: N/A

TYPE OF DEVELOPMENT: Hazardous Waste – DGH&T Act

CLIENT FILE NO.: 5239.00

OVERVIEW:

On December 4, 2006, the Department received an Application from Hazco Environmental Services for the construction and operation of a hazardous waste transfer facility at 1199 St. James Street in Winnipeg.

On December 19, 2006 the Department placed copies of the Application in the Public Registries located at 123 Main St. (Union Station), the Winnipeg Centennial Public Library and the Manitoba Eco-Network. 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 Winnipeg Free Press on December 23, 2006. The newspaper and TAC notification invited responses until January 16, 2007.

COMMENTS FROM THE PUBLIC:

The following question was raised by Clean Harbors regarding the fire suppression system at the new facility.

Do they need to meet the same requirements we have for a foam suppression system, monitoring, etc.

Disposition:

The comments were forwarded to the proponent and the following response was received:

The question is posed by our direct competition after the thirty day notification period posted by Manitoba Conservation in the December 23, 2006 Winnipeg Free Press. Hazco does not feel obligated to answer this question posed by the competition.

However, to clarify for the Province:

- We are currently having our fire plan prepared by Dan Oleksiuk of D. Oleksiuk &

Associates Inc. in accordance with the National Fire Code, and a letter of confirmation is being prepared by Mr. Oleksiuk to be presented to both the City of Winnipeg, and Manitoba Conservation. This plan will then be reviewed by the City, and any required changes deemed necessary will be identified at that time.

- The system that Clean Harbors installed was a requirement for the City of Winnipeg Planning Department, and not Manitoba Conservation. Hazco will install the level of fire protection required as per the City of Winnipeg.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Culture, Heritage and Tourism, Historic Resources Branch had no concerns.

Infrastructure and Transportation, Highway Planning & Design Branch had no comments/concerns.

Canadian Environmental Assessment Agency noted that application of the Canadian Environmental Assessment Act with respect to this application will not be required

Water Stewardship had the following comments:

What will be the source of water supply to the proposed service centre?
Appropriate backflow prevention should be provided on water supply as per the provincial plumbing code and the WCS AWWA Cross Connection Control Manual or CSA B64.10-01 Manual for the Selection and Installation of Backflow Prevention Devices. Backflow protection should be commensurate with the degree of hazard.

Disposition:

The comments were forwarded to the proponent and the following response was received:

Hazco has occupied an existing building that was formerly approved and utilized as a paint manufacturing facility in conjunction with an office building. In obtaining our Occupancy Permit from the City of Winnipeg, all facets of our operation and previous operations were reviewed in detail by the City, with any additional requirements being identified to us and completed at that time.

As part of this process, the City of Winnipeg Planning Department has not identified any additional requirements pertaining to plumbing alterations, and we conclude that our facility complies with the provincial plumbing code.

Conservation, Operations - Central Region had the following comments:

Question #1: General

- Applicant should be aware that a current review of Manitoba's Hazardous Waste Legislation may impact on the classification of Hazardous Waste in the future.
- Proponent should be aware that storage of combustible and flammable substances must comply with the National Fire Code.

Disposition:

The comments were forwarded to the proponent and the following response was received:

Hazco is aware that there may be pending changes to the current Manitoba Hazardous Waste Legislation that may affect the classification of Hazardous Waste within the Province. If changes occur, we will make the appropriate changes to our operations plan and subsidiary response plans to comply with the changes in legislation. As indicated in our June 12, 2007 letter responding to the previous TAC questions, our approval obtained from the City of Winnipeg requires us to incorporate and agree to adhere to the National Fire Code quantities set out for both inside and outdoor storage. Please refer to the June 12, 2007 letter for a complete overview of our criteria.

Question #2: Outside Storage

- Require additional information (i.e. manufacturer specifications) for Sea Can (Sea Box) containers.
- The volume of the secondary containment area should be sufficient to contain a leak of the largest vessel in storage.

Disposition:

The comments were forwarded to the proponent and the following response was received:

Hazco will utilize at least eight (8) - 40 foot Sea Can units (specifications attached) as our primary 90 day containment system to store the various levels of compatible chemicals in the yard adjacent to our office building. These units will act as our secondary form of containment for compatible wastes, and will be staged with an 8 foot separation between each unit for easy access in the event of an emergency. Each unit will be capable of being transported and insured under our Provincial Transporter Number (MBC03868) to provide additional security, as well as accessibility to transport compatible waste streams within each unit. Compatibilities will be as follows:

1. Acid and Basic waste - Separation and individual containment of both waste types within the trailer will also be maintained.
2. Organic and Inorganic waste
3. Oxidizing waste
4. Water Reactive and Pyrophoric waste
5. Aerosol waste
6. Flammable liquid waste
7. Pesticide, Herbicide, and Cyanide type waste (including thiocyanates and isothiocyanates)
8. Non regulated material

In conjunction with this onsite storage, we will be receiving and staging ongoing waste via our field trailer units (16 foot enclosed trailers and 5 Tonne enclosed trucks) on a regular pickup schedule that is on a case-by-case service. These trailer units, in some instances, will be received and securely parked at our facility as an interim measure prior to being processed and transferred into our long term storage. The facility is secured and will feature a 24 hour web-enabled security system.

Based on the nature of our industry, and the need to effectively maximize our disposal options by proper collection, repackaging, and transportation, Hazco requests a minimum storage period within our facility of 90 days to effectively maintain these goals. Hazco is aware of the spill containment criteria as outlined in our response letter from June 12, 2007.

Each labpack drum is packaged according to standard industry guidelines to ensure that the drum itself can contain any and all leakage of material packaged within the drum. For drums that contain bulk liquids, each drum will be stored on secondary spill containment trays designed to hold the volume of the entire contents of the drum. These trays and drums will also be stored within the van body, which will be acting as a tertiary containment system for this waste at that point. As such, the van body will act at a minimum of secondary containment for labpacks, and tertiary containment for bulk liquids on containment trays. The geosynthetic liner will then act at a minimum as a tertiary containment system for the transfer facility.

Question #3: Water Management Program

Does the Applicant have a formal water management plan with respect to sampling and disposal?

Disposition:

The comments were forwarded to the proponent and the following response was received:

Hazco has established a draft of our operating plan that will be finalized with the establishment of the facility. With the spill containment system previously outlined, Hazco concludes that the only formal water management plan that will be required will be in the event of an unscheduled release of hazardous materials from our storage area. Regularly scheduled and ongoing sampling of the surface water of the facility will not occur outside of this situation.

Question #4: Indoor Storage

Indoor spill management collection areas should not be connected to municipal sewer.

Disposition:

The comments were forwarded to the proponent and the following response was received:

The indoor spill management collection areas are not connected to the municipal sewer. All drains either have been or are slated to be sealed prior to initiation of work to prevent the discharge of any indoor releases to the municipal sewer.

Question #5: Method of Operation

Does the Applicant have a regular inspection plan to identify potential leaks of materials in storage? Loaded transport units are not designed as fixed storage units and may have limitations when used as such.

Disposition:

The comments were forwarded to the proponent and the following response was received:

Hazco has established a draft of our operating plan that will be finalized with the establishment of the facility. The operations plan includes the specifications for inspections that will be performed at a minimum of once per week and include:

- Perimeter inspection of storage areas and drums
- Inspection of site security
- Visual inspection of site cleanliness
- Documentation of drum levels and integrity

- Inspection of waste containers for labels, integrity, and visibility of labels
- Inspection of secondary containment for evidence of deterioration, malfunction, leaks or improper operation
- Inspection of water treatment system including all piping, and drum integrity
- Inspect leak detection and drum collection system
- Documentation of any wastewater in the Water Treatment Facility sump
- Fire extinguisher recharge dates
- Safety supplies

The inspection and any corrective action will be documented on an Inspection Form. The Inspection form will be forwarded to the facility manager for review and corrective action. If the inspection reveals a situation that is of immediate concern to the environment or an individual, a Hazco supervisor will be contacted immediately and corrective actions will be taken. Records of inspections and corrective action are available for review by customers, and regulators.

The facility will have immediate and weekly inspections after any storm or catastrophic event to check the following:

- any liners and drainage control facilities for evidence of deterioration, malfunction, leaks or improper operation, and
- leak detection systems to ensure proper functioning and to determine if the leak is being generated or is accumulating.

We are aware of both the limitations and advantages associated with loaded transport units, and we have established comprehensive operating practices that will ensure that any suspected limitations do not interfere with the activities of the waste transfer station. Primary among these is the installation of an in-situ liner system within the storage area itself in the event of a release of liquids from the storage vessels and trailer units.

Question #6: Potential Impacts

Does the Applicant have a formal air monitoring program?

Disposition:

The comments were forwarded to the proponent and the following response was received:

There is no formal air monitoring program developed for the waste transfer station at this time. With the exception of small quantity bulking activities, no

processing or treatment of contaminants of concern that would trigger the requirement of a mandatory program, will be undertaken.

Conservation, Environmental Assessment and Licensing Branch had the following comments:

Question #1: Storage in Sea Cans

Only drums? Totes as well? Labpacks?

Disposition:

The comments were forwarded to the proponent and the following response was received:

Hazco will utilize at least seven (7) - 40 foot ISO certified Sea Can units as our primary 90 day containment system to store the various levels of compatible chemicals in the yard adjacent to our office building. These units will act as our secondary form of containment for compatible wastes, and will be staged with an 8 foot separation between each unit for easy access in the event of an emergency. Each unit will be capable of being transported and insured under our Provincial Transporter Number (MBC03868) to provide additional security, as well as accessibility to transport compatible waste streams within each unit. Compatibilities will be as follows:

1. Acid and Basic waste – Separation and individual containment of both waste types within the trailer will also be maintained.
2. Organic and Inorganic waste
3. Oxidizing waste
4. Water Reactive and Pyrophoric waste
5. Aerosol waste
6. Flammable liquid waste
7. Pesticide, Herbicide, and Cyanide type waste (including thiocyanates and isothiocyanates)
8. Non regulated material.

The Sea Cans will store waste that is packaged in the type of primary containment identified at a minimum in the IATA Dangerous Goods Regulations, Section 5.0.7, Table 5.0.C. These containers include, but are not limited to:

- ◆ UN approved 205 Litre non-removable head (bung) drums with specification 1A1
- ◆ UN approved 205 Litre removable head (open top) drums with specification 1A2
- ◆ UN approved 20 Litre non-removable head (bung) plastic pails with specification 1H1
- ◆ UN approved 20 Litre removable head (open top) plastic pails with specification 1H2
- ◆ UN approved 1,000 litre IBC plastic totes with specification 31 HA1 specified under 49CFR 172.01 for hazardous and corrosive liquids

- ◆ UN approved 1,000 kilogram IBC woven bag rated for Class 9 dangerous goods rated for Packing Groups I, II, and III with specification 11HH2

In conjunction with the storage of containers, Hazco will also ensure the following containment criteria is implemented:

- ◆ Each labpack drum is packaged according to standard industry guidelines to ensure that the drum itself can contain any and all leakage of material packaged within the drum.
- ◆ For drums that contain bulk liquids, each drum will be stored on secondary spill containment trays designed to hold the volume of the entire contents of the drum. These trays and drums will also be stored within the van body, which will be acting as a tertiary containment system for this waste at that point. As such, the van body will act at a minimum of secondary containment for labpacks, and tertiary containment for bulk liquids on containment trays.
- ◆ The geosynthetic liner will then act at a minimum as a tertiary containment system for the transfer facility.

Question #2: Total Sea Box Storage

What will be the total drums in a Sea Box at one time-i.e. maximum number of drums.

Disposition:

The comments were forwarded to the proponent and the following response was received:

Based on our current and past history with the use of the 40 foot ISO certified Sea Box units, we can store 72 drums on pallets per layer in these containers. Hazco will utilize double stacking within these units on a case-by-case basis. Therefore, we will store a maximum of 144 drums in each Sea Can unit.

Question #3:

1. The field trailer units (trucks) – will they be parked (full) overnight
2. Will there be times when an incoming truck has to sit to wait to be unloaded, or will all collector trucks be unloaded the same day?
3. Do field trailer units have secondary containment?

Disposition:

The comments were forwarded to the proponent and the following response was received:

Hazco will be receiving and staging ongoing waste via our field trailer units (16 foot enclosed trailers, 5, 10, and 20 Tonne enclosed trucks with secondary containment) on a regular pickup schedule that is on a case-by-case service. These trailer units, in some instances, will be received and securely parked overnight while fully loaded at our facility as an interim measure prior to being processed and transferred into our

long term storage. The facility is secured and will feature a 24 hour web-enabled security system. The types of vehicle are as follows:

Hazco 20 Tonne Double Drop Trailers

The double drop trailers provide safe and economical transport of wastes. The trailers have a self-contained crane and winch system to meet efficient servicing requirements. They are also equipped with secondary containment. The inside floor of the trailer is lined with a 250 mil HDPE liner that is continually inspected upon off loading. Hazco owns and operates twelve of these trailers in western Canada.

Hazco 10 Tonne Picker Truck and Trailer Units

Picker trucks allow versatility and durability for field use anywhere in western Canada. Each deck is specially designed with secondary containment. With the available trailer, each unit is capable of 20 tonnes. A picker truck is located at each Hazco office.

Hazco 16 Foot Enclosed Field Trailer

The 16 foot field unit allows smaller waste generators to be serviced in a timely manner. This trailer also has a self-contained crane and winch system to meet efficient servicing requirements. The inside floor of the trailer is also lined with a 250 mil HDPE liner that is continually inspected upon off loading. Specially designed for urban generators with limited access, lab-pack generators, spill response or clients with special requirements.

Based on the nature of our industry, and the need to effectively maximize our disposal options by proper collection, repackaging, and transportation, Hazco requests the following to effectively maintain these goals:

- ◆ A minimum interim storage period of 10 days for staged waste brought to our facility from client locations, to be temporarily stored in field transport units prior to term storage within our facility.
- ◆ A minimum term storage period within our facility of 90 days, with transport to the final disposal facility occurring within that time frame.

Question #4:

Will lead acid batteries be received? Will they be stored in a Sea Box?

Disposition:

The comments were forwarded to the proponent and the following response was received:

Lead acid batteries will be received by Hazco, and stored accordingly on pallets inside either a Sea Box, or within the designated storage rooms of the facility.

Question #5:

Use of Sea Box units or 53' modified van bodies – please clarify. Do they have secondary containment?

Disposition:

The comments were forwarded to the proponent and the following response was received:

Throughout the course of establishing our facility and associated permits, Hazco has concluded that we will utilize at least seven (7) - 40 foot ISO certified Sea Box units as our primary 90 day containment system to store the various levels of compatible chemicals in the yard adjacent to our office building. Please refer to Question #1 for further clarification pertaining to secondary containment.

Question #6:

Joint Tenancy? In Dan Oleksiuk's letter to the City of Winnipeg dated April 24, 2007 there is mention of "joint tenancy". What is this referring to? Another tenant in the same building? Who?

Disposition:

The comments were forwarded to the proponent and the following response was received:

Hazco Environmental Services, a division of CCS Inc. is the tenant at 1199 St. James Street, with a sublet for office space to Apex Realty. The Tenancy consists of the northern half of the non-combustible sprinkled building with a 2 hour fire wall separating the north and south designations of the building. The south occupancy is held by Acklands Grainger.

Conservation, Sustainable Resource & Policy Management Branch had the following comments:

Question 1.

The Application states that "the proposed site will be developed for secure special waste collection, short term storage and, in some cases, final disposal". In view of the location of the proposed facility within Winnipeg and based on the information provided in the Application, it is recommended that the proposed facility be permitted to be utilized only as a storage/transfer facility for waste and that there should not be any waste blending or any form of waste treatment/disposal whatsoever permitted at this facility unless a detailed proposal describing the specific treatment/disposal procedure is submitted to the Department and approved by the Director.

Disposition:

The comments were forwarded to the proponent and the following response was received:

The purpose of the facility is to serve as a collection and temporary storage facility for various waste materials that are picked up by Hazco throughout Saskatchewan, Manitoba, and parts of Ontario, so that we can repackage materials prior to shipment for final disposal. The basic operational mechanisms that we will adhere to fall into the following points:

- ◆ Partial drums of compatible Lab Pack waste classes will be collected at the facility, and then reconsolidated to maximize the volume of waste for disposal in each container prior to final disposal. In all cases, the waste will be tracked coming into the facility in the original containers, reconsolidated into new UN approved containers, and then shipped for final disposal. All waste will be accurately inventoried and tracked by use of a data base throughout all phases of collection and reconsolidation.
- ◆ Compatible liquid waste such as paints, solvents, and oils, will be reconsolidated into drums by bulking the liquids into UN approved drums prior to final shipment. All empty metal and plastic containers will be triple rinsed prior to recycling at an approved recycling agency in Winnipeg.
- ◆ Aerosol cans that contain paint waste and non regulated waste will be punctured and drained whenever possible by use of an approved can puncturing unit, with all compatible liquid residues being bulked together. Aerosol can puncturing devices safely puncture the cans, capturing their contents for easy recycling or disposal. Spray nozzles are removed as well. A simple, low-capacity can operator puncturing unit does not require power and is manually operated. The operator presses on a handle which causes a puncture pin to pierce the aerosol can, which is secured inside a cylinder. The can's contents are then collected in a drum. A two part, combination filter, which collects VOCs and propellant liquids, threads to the 3/4" bung of a drum. The combination filter does two things. The base of the filter is a coalescing cartridge. In it, the specially designed filter media coalesces microscopic liquids from the escaping propellant and forms them into droplets. The droplets collect in the reservoir of the coalescing cartridge and can be easily drained, directly into the drum if desired, by opening the drain valve on the bottom. Dry propellant then moves throughout the second stage of the filter, the activated carbon cartridge, which absorbs hydrocarbons and odor.
- ◆ No blending, neutralization, or treatment of hazardous waste streams will occur. Reconsolidation of waste will be based on chemical compatibility identified at a minimum by:
 - The Transportation of Dangerous Goods Act,
 - 2006/2007 Hazardous Materials, Substances, & Wastes Compliance Guide.

- ◆ Final disposal of any regulated hazardous waste will not occur at this facility in any form. All regulated hazardous waste will be transported to an approved final disposal facility. Non regulated waste that is collected and received at the transfer facility will be processed on site whenever possible.

Question 2.

The terms and conditions of the licence should specify the specific types of wastes that are permitted to be received at the facility. The Application states that “the proposed facility will serve as a transfer station for the purpose of temporary inside and outside storage . . . of various hazardous waste streams in TDG classes 2, 3, 4, 5, 6, 8, 9”. TDG class 6 includes two divisions as follows: 6.1 (toxic substances) and 6.2 (infectious substances); the Application does not address the handling of infectious substances and so the licence should specify that the facility shall not receive waste that falls within class 6.2 (infectious). Further, the licence should specify that waste containing polychlorinated biphenyls (PCB) shall not be accepted at this facility.

Disposition:

The comments were forwarded to the proponent and the following response was received:

Hazco is licenced and permitted to handle, collect, and transport waste identified under TDG within classes as follows:

- ◆ Class 2
- ◆ Class 3
- ◆ Class 4
- ◆ Class 5
- ◆ Class 6.1
- ◆ Class 8
- ◆ Class 9

Hazco is not licenced and permitted to handle, collect, and transport waste identified under TDG Class 6.2 (infectious). At no time, will hazardous waste that falls into Class 6.2 (infectious) be received at this facility.

Even though Hazco is licenced and permitted to handle, collect, and transport waste identified under TDG Class 9, this facility will not receive any regulated volumes of polychlorinated biphenyl (PCB) material.

Question 3.

The term “special waste” is mentioned in the Application in terms of wastes to be received at the proposed facility. ‘Hazardous waste’ is defined in The Dangerous Goods Handling and Transportation Act and Regulations but the term ‘special waste’ is not defined in the legislation. Perhaps the Applicant should be requested to list the specific types of waste materials that fall under the category of “special waste” where this term is mentioned in the Application and perhaps ‘special waste’ should be

defined in the licence so that there is a clear understanding of all of the specific types of waste materials that may be received at the facility.

Disposition:

The comments were forwarded to the proponent and the following response was received:

For the purpose of this application, the term Special Waste is equal to the term Hazardous Waste, and accommodates for the same definition identified specifically under the Transportation of Dangerous Goods Handling and Transportation Act and Regulations.

Question 4.

The licence should specify the maximum quantity of waste that is permitted to be in outside storage at the facility at any point in time and the maximum quantity that is allowed for inside storage at any point in time. Further, the licence should specify the maximum storage period allowed for waste in storage at the facility; a maximum storage period of 90 days is recommended.

Disposition:

The comments were forwarded to the proponent and the following response was received:

As per our approval obtained from the City of Winnipeg, we have incorporated and agreed to adhere to the National Fire Code quantities set out for both inside and outdoor storage.

Following is a table specifying the proposed outdoor storage volumes for the facility. These volumes were derived utilizing planned storage capacity for the facility, as provided by the secondary trailer storage units. Hazco has also referenced the Small Quantity Exemptions for dangerous goods for indoor storage as per the National Fire Code section 3.2.7.1, as well as the indicated outdoor storage volumes for Classes 2, 3, 4, 5, 6, 8, and 9. As outlined by D. Oleksiuk & Associates Inc. during our Application procedure to the City.

See Appendix A for the indoor and outdoor storage requirements provided by D. Oleksiuk & Associates Inc.

INDOOR & OUTDOOR STORAGE QUANTITIES FOR DANGEROUS GOODS

Class	Division	Indoor Storage Inventory Levels	Outdoor Storage Inventory Levels
2 – Gases	1 – Flammable Gas	Not to exceed 100 KG	Not to exceed 6,000 KG

	2 – Non-Flammable, Non-Poisonous	Not to exceed 150 KG	Not to exceed 3,000 KG
	3 – Toxic or Corrosive	Excluded	Not to exceed 500 KG
3 – Flammable and Combustible Liquids	N/A	Excluded	Not to exceed 40,000 L
4 – Flammable Solids	1 – Flammable Solids	Not to exceed 100 KG	Not to exceed 20,000 KG
	2 – Subject to Spontaneous Ignition	Not to exceed 50 KG	Not to exceed 3,000 KG
	3 – Dangerous when wet	Not to exceed 50 KG	Not to exceed 1,500 KG
5 – Oxidizing Substances	1 – Oxidizers	Packing Group I, II, & III – Not to exceed 250 KG or 250 L	Packing group I, II, & III – Not to exceed 3,000 KG or 3,000 L
	2 – Organic Peroxides	Not to exceed 100 KG or 100 L	Not to exceed 500 KG or 500 L
6 – Poisons and Infectious Substances	1 – Poisonous Substances	Packing Group I – Excluded Packing Group II – Not to exceed 100 KG or 100 L Packing Group III – Not to exceed 1000 KG or 100 L	Packing Group I – Not to exceed 2,400 KG or 2,400 L Packing Group II – Not to exceed 2,400 KG or 2,400 L Packing Group III – Not to exceed 2,400 KG or 2,400 L
	2 – Infectious Substances	Excluded	Excluded
8 – Corrosive Substances	N/A	Packing Group I – Not to exceed 500 KG or 500 L Packing Group II – Not to exceed 1,000 KG or 1,000 L	Packing Group I – Not to exceed 6,000 KG or 6,000 L Packing Group II – Not to Exceed 18,000 KG or 18,000 L

		Packing Group III – Not to exceed 2,000 KG or 2,000 L	Packing Group III – Not to exceed 6,000 KG or 6,000 L
9 – Miscellaneous	N/A	Based on unique characteristics	Not to exceed 20,000 KG or 20,000 L

Based on the nature of our industry, and the need to effectively maximize our disposal options by proper collection, repackaging, and transportation, Hazco requests a minimum storage period within our facility of 90 days to effectively maintain these goals.

At all times, the waste will be securely stored, identified, tracked, and inventoried, and have all aspects of this management clearly indicated and accounted for in our Fire Protection Plan for Public Safety.

Question 5.

The Application refers to the “parking and staging of empty and loaded transport units within the bermed, lined secondary containment area”. The licence for the facility should specify the maximum number of transport units containing waste that are allowed to be parked at the facility at any one time and should also specify a maximum time period that a unit containing waste material is allowed to be parked at the facility (for example, the licence might state that no transport units containing waste shall be parked for more than 10 consecutive days at the facility).

Disposition:

The comments were forwarded to the proponent and the following response was received:

As per our Approval from the City of Winnipeg, Hazco will utilize eight (8) - 53 foot mobile modified van bodies as our primary 90 day containment system to store the various levels of compatible chemicals in the yard adjacent to our office building. These units will act as our secondary form of containment for compatible wastes, and will be staged with an 8 foot separation between each unit for easy access in the event of an emergency. Each unit will be insured and licenced under our Provincial Transporter Number (MBC03868) to provide additional security, as well as accessibility to transport compatible waste streams within each van. Compatibilities will be as follows:

1. Acid and Basic waste – Separation and individual containment of both waste types within the trailer will also be maintained.

2. Organic and Inorganic waste
3. Oxidizing waste
4. Water Reactive and Pyrophoric waste
5. Aerosol waste
6. Flammable liquid waste
7. Pesticide, Herbicide, and Cyanide type waste (including thiocyanates and isothiocyanates)
8. Non regulated material.

In conjunction with this onsite storage, we will be receiving and staging ongoing waste via our field trailer units (16 foot enclosed trailers and 5 Tonne enclosed trucks) on a regular pickup schedule that is on a case-by-case service. These trailer units, in some instances, will be received and securely parked at our facility as an interim measure prior to being processed and transferred into our long term storage.

As such, Hazco requests the following storage periods:

- ◆ A minimum term storage period within our facility of 90 days, with transport to the final disposal facility occurring within that time frame,
- ◆ A minimum interim storage period of 10 days for staged waste brought to our facility via our 16 foot enclosed field trailers/ 5 Tonne trucks transported from client locations to our transfer facility for processing.

Question 6.

The Application states that a “secondary containment area will consist of a geo-synthetic clay liner (GCL) placed below a layer of gravel”. The Application further describes that “the installation will consist of the stripping of the top 0.3 metre of gravel, preparation of the existing clay base, placement of a geo-synthetic clay liner (GCL) ... and the replacement of 0.3 metre layer of compacted gravel”.

Is literature available supporting this design for a containment area for hazardous waste? If so, what are the recommended specifications re. thickness of the gravel surface and the GCL; will this be addressed in the terms and conditions of the licence for the facility? Are other similar facilities using this method of containment?

Perhaps the Applicant could be requested to provide additional supporting information pertaining to the design of the proposed containment area.

Disposition:

The comments were forwarded to the proponent and the following response was received:

The method proposed by Hazco to incorporate a geosynthetic clay liner comes from our well established and proven track record in developing containment systems for clients throughout Canada, United States, and Peru to securely store and process hazardous wastes. Our approved landfill and landfarm facilities throughout western Canada utilize this method to process soils contaminated with hazardous wastes including, but not limited to, polychlorinated biphenyls (PCB), petroleum

hydrocarbon impacted soils, leachable metal impacted soils, and perchloroethylene impacted soil. This system has also been used in the development of management systems for hazardous waste impacted lagoon and pond water locally and internationally.

Please note that the GCL liner will act at a minimum as tertiary containment for the series of interim mobile modified van bodies, and represents an increased level of protection for this facility above and beyond regulatory expectations.

References and information on liner technology was also provided.

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 Hazardous Waste Collection facility. Enforcement of the Licence should be assigned to the Central Region.

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