QUANTEX TECHNOLOGIES INC.

25 AKERLEY BLVD, DARTMOUTH, NS. B3B 1J7 PHONE 902-468-8848 FAX 902-468-8767

Oct 31, 2003

Nova Scotia Dept. of Environment & Labour
Box 697, Halifax NS,
B3J 2T8

Attn.Chris Daly

Reference: Environmental Assessment - 25 Akerley Blvd, Dartmouth

Dear Mr Daly:

Quantex Technologies is involved in providing a range of environmental services to various clients throughout the region. The company presently operates a used oil processing facility and wastewater treatment plant at this address.

The company operates a fleet of vacuum trucks that are handle primarily non- hazardous materials such as oily solids from catch basins and interceptor pits. The waste solids are shipped on a regular basis to Quantex plants in Ontario located in Toronto and Kitchener.

We frequently have clients with hazardous materials who require disposal services, presently our option is to do a 'milk- run', whereby we will pick up 15-20 drums of hazardous materials and ship these along with 60-80 drums of our non - hazardous wastes. This sometimes is not logistically practical or cost effective which then results in our losing the business to our competition.

Quantex services many of the larger car dealerships in metro and would like to expand our services offering to these clients by including removal of body shop type wastes such as used paints, thinners and paint sprayer cleaning solutions.

In order that the company may pursue these areas of growth we will require approval for a Dangerous / Waste Dangerous Goods Handling Facility. As part of the approval process, we were informed that an environmental assessment review was required .

In reviewing the Environment assessment regulations under the Nova Scotia Environment Act, the first step in the environmental assessment is the registration. Please consider this letter as our Environmental Assessment Registration application.

Included is the information as described in the minimum requirements and should you require more detailed information it shall be supplied upon request.

Yours truly,

Steve Milligan, President
Quantex Technologies Inc.

Minimum Requirements

The following is the minimum required for registration, as prescribed in the environment assessment Regulations.

A. *Name of the Undertaking*

The undertaking is a "Waste Dangerous Goods Drum Storage Facility"

B. Location of the Undertaking

25 Akerley Blvd.
Dartmouth, NS
B3B 1J7

C. Identification

Quantex Technologies Incorporated
25Akerley Blvd.
Dartmouth, NS.
B3B 1J7

President	Mr. Steve Milligan
Marketing Manager	Mr. Sid Hales

D. Nature of the Undertaking

Quantex Technologies is an environmental services company, servicing many clients throughout Atlantic Canada. Part of this business includes the removal and processing of both hazardous and non-hazardous wastes from automotive related industries. Our site at 25 Akerley Blvd. contains the local business office, the used oil & water processing plant, a drum handling facility for non-hazardous materials, as well as the truck fleet.

E. The Purpose and Need for the Undertaking

Quantex Technologies as a provider of environmental type services is being requested by clients to offer additional services..... such as the removal of body shop type wastes. These materials would be transported in drums, stored on our site and then shipped off- site for processing and destruction. The secure compound at 25 Akerley Blvd. is a suitable storage site to support these business requirements.

F. Operation Schedule

Hours of normal operation are Monday to Friday 8:00 am. to 16:30 pm. The plant is staffed usually 24 hours a day / 7 days a week. We normally operate on this schedule year around with the exception of statutory holidays. However drum movements are not likely to occur outside normal business hours.

G. Description of the Undertaking

Quantex Technologies will bring will bring sealed drums of waste materials such as body shop solvents into the drum storage compound where they will be stored and then shipped in trailerload quantities to Ontario processing plants.

*We intend to store these wastes on site, and **are not** seeking an approval for processing or bulk wastes on site.*

The intent is to primarily focus on the automotive shop wastes; which will be mainly flammable paints, solvents such as thinners and paint spray gun washing solutions, possibly some corrosive type materials such as batteries and battery acids.

Quantex provides disposal services to local clients such as high school labs and local businesses by lab-packaging small quantities of miscellaneous organic & in-organic chemicals into 205 liter drums / 20 liter pails and shipping these directly from the clients site to the Ontario processing facilities. It is intent to request permission to temporarily store these types of pre-packaged wastes on site, while awaiting transport on site.

We do not transport PCB contaminated materials, Bio-medical wastes or Explosives - which means that these types of waste will not be stored on-site.

H. Approvals Required

As advised by the Department of the Environment & Labour, Quantex Technologies Inc. will require an approval of the Environmental Assessment Regulations. We will qualify as a Class 1 site pursuant to Schedule "A"

Quantex Technologies Inc. also requires approval for a Dangerous / Waste Dangerous Goods Handling Facility pursuant to section 10 of the Activities designation regulation as laid out under the Class 1 approval.

I. Sources of Public Funding

There are no sources of public funding for this undertaking.

Environmental Details

1. *Surrounding Area*

The facility is in a commercial / industrial area known as Burnside Industrial Park. This area is dedicated to commercial and industrial businesses. There is no residential development in the area. The facility is located in a yard with security fencing restricted access and security zones. The property is boundaried by a four lane street, commercial truck fueling depot, the CN tracks and a furniture moving company.

2. *Spill Considerations*

The drums that will be used for collecting body shop wastes will meet UN approval specifications for hazardous materials transportation. The open top drums are constructed from heavy gauge steel, have capacity of 205 litres and are sealed with a locking ring and gasket. These drums will be properly labeled as to contents and shall comply with all applicable TDG regulations. Normal storage will be in the upright position with the tops and lock rings tightened down, shrink wrapped on pallets - these drums are capable of withstanding an accidental upset.

Corrosive materials which would react with steel drums will be stored in an approved 205 liter plastic drum with threaded bungs and gaskets, these will also be shrink wrapped and placed on pallets.

The risk of spills from leaking drums are minimal since all drums must be visually inspected at the customers site prior to being picked up by the driver. The drums of waste will be elevated on pallets and stored in a protected area. We have regular security checks of the yard and compound, which would result in any accidental seepage would being noticed..

The fact that drums are not being processed on site reduces the amount of material handling occurring.

Company policy mandates that only fully trained & certified operators - may operate forklift equipment, skilled operators further reduce the potential for an incident occurring during off loading / loading procedures. Our forklift operators are certified to meet NSDEL standards.

Should a drum rupture occur it might cause the all the contents to leak out , the spill would be less than 205 liters. If during the loading process an entire pallet was damaged or dropped the maximum volume of the resulting spill would be 820 liters.

We have sorbent materials and spill kits readily available on site that are capable of cleaning up a spill volume of several thousand liters.

The drum storage area has primary containment curbs and sumps.

The paved yard which is dyked and was designed with sumps, serves as a secondary containment. The yard is capable of handling a spill involving several thousand liters, without permitting any liquids to migrate from the site.

There are no storm drains on the property, the paved yard has drainage valves which are normally closed and are manually operated to allow drainage of rainwater into the storm sewers.

Quantex is a recognized provider of spill response / clean-up services with vacuum trucks based right on site. Should a spill occur it would be contained on our property and could be easily cleaned up from the asphalt parking lot.

Spill control kits are strategically placed throughout the yard, these include adsorbent pads, booms, as well large quantities of floor dry and over pack drums are kept on site, modern vacuum equipment is available on short notice.

Staffing is available on an emergency call out basis 24 hours a day.

3. *Volume of Drums*

Drum shipments presently occur every 3-5 weeks, given the potential for an increase in our business and incoming drums. We expect the frequency to increase somewhat, with incoming drums remaining stored at the site for no longer than 4-5 weeks.

Company policy requires that we schedule outgoing shipments as soon as possible after reaching the trailerload quantity. This policy would limit the number of dangerous goods store on site to a maximum of 110 drums.

4. *Transportation Routes*

Company policy prevents our trucks from traveling through residential areas, generally the following routing will be used for incoming drums.

Local transportation routes used for drums are

Halifax Area - Across Mackay Bridge onto Windmill Rd. up Akerley Blvd.

South Shore & Valley Bi-Centennial Highway through Bedford, over Magazine hill onto Windmill, up Akerley Blvd

Bedford / Sackville - through Bedford over Magazine hill up Akerley Blvd

Downtown Dartmouth & Cole Harbour areas On the Circumferential Highway onto Burnside Drive down Akerley Blvd

Truro Area Inbound Route 102 onto # 118 onto Akerley Blvd

Eastern Shore Route 7 , Route 7 Bypass onto #118 onto Akerley Blvd.

5. *Handling Procedures and Documentation*

Drums of waste will be inspected by the driver for leaks prior to being loaded at the customers site, should any drums be in a questionable condition - the drums will be rejected and the customer will be required to transfer the materials into another drum that is in a condition suitable for transport - or use an 'overpack salvage drum' .

All employees directly involved with the drum handling operations shall be TDG certified

Any unknown compounds will be left at the client's site until the drum contents are properly ascertained and properly labeled.

All materials will be handled in compliance with TDG Regs and shall be properly identified, labeled as to contents and handled accordingly.

Vehicles shall be properly placarded as to contents, with proper documentation & waybills completed for all materials on board.

Spill control kits shall be available on each vehicle that carries the waste materials - in a sufficient quantity to deal with any minor situation.

The off loading scenario will be as follows;

Upon arrival at Quantex, the driver reports to plant receiver with paperwork, load count is verified and truck is directed to drum storage compound at the rear of the building. The drums will be off-loaded by forklift using an approved lifting device and placed on pallets, shrink wrapped and placed into the storage building.

Procedures will be in place to ensure proper segregation of any non-compatible materials as well as the racking /stacking procedures comply with local fire codes.

Waste stored on site will be documented and inventories adjusted with each shipment in or out, this procedure will provide precise details as to exactly what volume of materials is on site at any given time.

Loading Outgoing Trailers:

A forklift will remove a pallet of 4 drums from the building, the shipper will visually inspect the skid to ensure all drums are sealed with labels in place, the skid will then be placed onto the van trailer for shipment to the disposal site. *This process will be repeated until the trailer is full roughly 24 skids.*

The drum contents will be logged as these are loaded on the trailer- to assist in the preparation of the shipping documents, the quantities loaded will also be removed from the inventory storage records.

6. *Activities and Staffing*

Quantex has 20 employees on site, this is location is operated by Quantex with no other tenants on site, all employees are aware of our safety policies and procedures and only handle dangerous goods after being properly trained and orientated.

We intend to carry these policies and procedures forward and will ensure the drum handling facility is operated in safe manner in full compliance of municipal, provincial and federal regulations.

7. Building Layout

A copy of the building layout is included as schedule 2. This diagram identifies the plant, tank farm and drum storage facility. The paved yard is secure with chain-link fencing, locked gates. The drums will be
palletized and shrink wrapped, stored inside a storage building.

Additional security features include a well lighted yard, with regular outside rounds being conducted by the plant operators including the yard areas. The facility generally operates 24 hours a day 7 days per week - (drum handling will only take place during normal business hours).

8. Drum Handling & Storage

The drums will be transported to our drum storage facility by one ton trucks / cube vans in small quantities such as 5-10 drums at a time. The driver will visually inspect the drums for leaks, proper labeling and ascertain the contents at time of pick-up.

The drums will be off-loaded by a forklift using an approved barrel lifting device, placed on wooden skids, shrink wrapped and moved into the drum storage building. The drums will not be handled again until the skids are loaded onto a tractor trailer for shipment to our Ontario plants.

The storage building is located in a corner of our fenced compound away from vehicle traffic minimizing the danger of an accidental impact.
The fire hazard is minimal as there are no other activities taking place in this area, there is no electricity which eliminates any sparking as an ignition source.
The building and yard is a non-smoking area, and we require hot work permits for any welding / burning work on site.
Generally our facility is normally staffed 24 hours a day, our operational procedures require rounds or yard inspections occurring at least on a daily basis, or more often depending on activities taking place..

9. Spill Containment

The primarily focus is on the automotive shop wastes; which will be mainly flammable paints, solvents such as thinners and paint spray gun-wash, possibly some corrosive type materials such as batteries and battery acids.

Some examples of which are

Paint (paints & lacquers)	UN 1263	Class 3	Packing Group 11
Paint Related Materials (thinners / reducer)	UN 1263	Class 3	Packing Group 11
Aerosols, flammable (paint spray cans)	UN 1950	Class 2.1	Packing Group 11
Toluene	UN 1294	Class 3	Packing Group 11
Xylene (stripping agents)	UN 1302	Class 3	Packing Group 11
Wet Batteries acid filled	UN 2794	Class 8	Packing Group 111
Battery Fluids	UN 2795	Class 8	Packing Group 11
Waste acids (spent sulphuric)	UN 2796	Class 8	Packing Group 11

All of these items will be contained in 205 liter drums (smaller quantities in 20 liter pails), with the exception of large automotive type batteries. These batteries will be palletized and shrink wrapped in the upright position with terminal connections protected to eliminate any accidental sparking.

The storage of these types of dangerous goods will not pose a severe hazard to any other occupancies in the immediate area. In the event of a minor spill the leak would be contained within the building or immediate area outside the building. A clean-up would be started immediately

Spill Kits containing sorbent pads and booms are strategically placed at various locations in the yard, as well as inside the drum storage building. Over pack drums are readily available for any leaking drums

The worst case scenario being that an entire skid of drums is upset, all the contents spilled into the yard the total spill volume would be about 800 liters.

The paved yard compound has containment sumps, barriers, slopes and dykes - which were designed to prevent a large liquid spill up to several thousand liters from escaping from the property. Our asphalt yard drains into dyked areas equipped with manually operated valves which are normally left in the closed position - these must be opened manually to allow the rainwater to flow into the storm sewers, Quantex operational policy requires that these be are to be closed after the sumps are drained.

Quantex is a recognized spill response contractor with trained operators readily available as well as response equipment and sorbent materials stored on site for controlling these types of emergencies.

10. Continency Plan

A Contingency Plan is in place in case of a major spill or incident. The plan is consistent with the Nova Scotia Continency Plan Criteria (March 1990), a plan copy is attached as schedule 3.

11. Employee Training

The company is member of the Nova Scotia Construction Safety Association and follows all the provincially recognized guidelines for safe work practices. Our safety programs are audited annually to ensure compliance with the provincial program.

These safe work practices and procedures have been accepted by the Federal Government, as well as large corporations including Imperial Oil, Michelin Tire, CN Rail.

All employees are trained in Emergency First Aid, CPR, general safe work procedures, and confined space training *(part of which relates to recognizing hazardous atmospheres)* . This training meets or exceeds provincially recognized standards.

The company orientation process requires that all employees who are working with any hazardous, materials / dangerous goods are given training in WHMIS , Transportation of Dangerous Goods.

All training / certification is kept current and updated on a regular basis as required.

Quantex training policy mandates that new employees are teamed with experienced personnel during the probationary training period. This 'job shadowing' enables the new employees to safely observe and then participate in the proper work methods during the training process.

New employees are trained in the recognizing the hazards, proper selection of Personal Protective Equipment (PPE) as well as how to wear it.

Any employees who work with dangerous materials are individually fit tested for proper respiratory protection..... trained in basic cleaning / maintenance tasks as well as wearing this protection correctly.

Employees are also given on the job related training in spill-response / containment along with training in clean-up methods / procedures.

All employees that will be handling drums are trained in safe job procedures, certified forklift operators, as well as having an awareness of the hazards associated with these type of wastes.

Periodically we dispose of small quantities of lab chemicals, from clients such as the local high schools. The chemicals are packaged off-site into 'labpacks' by qualified trained people using industry approved methods, these would be segregated in drums & pails to ensure chemical compatibility - these drums would be temporarily stored on site while awaiting the next shipment.

12. Future Direction

Quantex Technologies is a privately owned company that has over 35 years experience in the environmental services industry.

With the natural expansion of industry in Nova Scotia, the Dartmouth facility operation and shall continue to grow by developing our business. The drum handling facility will form an integral part of this future development, in the unlikely event that we should decide to move any drums in storage

would be shipped out for processing.

Quantex currently provides some of these disposal services, however without an temporary storage facility for waste dangerous goods - we are at a competitive disadvantage. Presently these materials must be shipped directly from the customers site in less than trailerload quantities.

The temporary storage of drums as outlined in this proposal will enable us to offer our clientele a high quality of services. This will be beneficial both to our company as well as our customers.....by providing the local marketplace with more options serves to strengthen the local economy.

Quantex Technologies Inc.

Contingency Plan

For Accidental Releases of Dangerous & Hazardous Wastes

Table of Contents

Item

Schedule 3

1. Contingency Plan Scope

Purpose

The purpose of the contingency plan is to recognize the workplace hazards associated with the storage of dangerous goods and hazardous materials, and to show the responses and actions required to contain a spill, and minimize its impact on the environment.

Location

This contingency plan applies to Quantex Technologies' drum storage area, at 25 Akerley Blvd, Dartmouth NS . **24 Hour Emergency Number 902-468-8848**

Responsibility

The contingency plan is the responsibility of Quantex Technologies Inc. , as it applies to its operation at the above location

Schedule 3

2. Notification Procedures

Reportable Spill Volumes

Any spills of dangerous materials such as Class 8 Acids	5 liters or 5 kg
Any spills of flammable liquids such as Class 3 paints / thinners	200 liters

On site - spill to be reported by

The employee who noticed the spill or plant engineer on shift

Off site- Wastes in transit

The driver having responsibility of the vehicle.

Spill is to be Reported to

Quantex Supervisory Management

Grant Milligan	Operations Manager	ext 24	Cel 456-8333	H 827-2802
Terry Stevens	Chief Engineer	ext 36		H 435-5604
Sid Hales	Back-up co-ordinator	ext 22	Cel 488-5441	H 435-1522

Notification of Authorities

Notification of the appropriate authorities shall be the responsibility of the supervisory manager in charge of the spill {one the above personnel}

Schedule 3

3. Notification List

Quantex Supervisory Management - CONTACT ONE MANAGEMENT SUPERVISOR

Grant Milligan	Operations Manager	ext 24	Cel 456-8333	H 827-2802
Terry Stevens	Chief Engineer	ext 36		H 435-5604
Sid Hales	Back-up co-ordinator	ext 22	Cel 488-5441	H 435-1522

Environment Canada - Regional Spill Reporting Number **426 -6030** or 1-800-565-1633

Halifax Regional Municipality Police Services or RCMP **911**

Halifax Regional Fire & Emergency Services **911**

CANUTEC - Canadian Transport Emergency Center **1-613-966-6666**

24 hour emergency response information / collect calls accepted

Schedule 3

4. Response Team Leader - Responsibilities of Management Supervisor

The management supervisor who is acting as response team leader shall be in charge of the countermeasures phase of the clean-up. This person shall be responsible for preforming, or ensuring the performance of the following :

- Make decisions on the severity of the spill, best clean-up method, any outside assistance requirements, notification of proper authorities and company personnel.

- Commit resources to clean-up the spill, also source additional materials / equipment if required.

- Notify and communicate with personnel representing government agencies.

- Direct the people and resources used in the clean-up operation.

- Act as a focal point for the information exchange on the spill and cleanup operation.

- Preserve samples of contaminated materials, if any occur.

- Prepare and submit an incident report, detailing the spill response and clean-up.

Schedule 3

5. Containment & Clean-up Procedures

On Site For small spills of corrosive materials / flammable liquids

FIRE HAZARD - Minimize any potentials sources of ignition that might pose a hazard.

Use sorbent materials to stop the liquids from spreading from the immediate area, ascertain if possible which drum is leaking and if possible either invert it or place it in an overpack container. Once the leak has ben stopped clean up the spill using more sorbent materials.

All employees working in the immediate clean-up area shall wear appropriate PPE consisting of coveralls, safety glasses- as well rubber boots / respirators as required.

Small spills on the concrete floor or paved parking lot may be cleaned up using floor dry without any lasting environmental impact.

For **larger spill**s the clean-up of the surface area may require the operation of a vacuum truck & mobile wash unit .The yard compound has **containment sumps & valves** - Immediately close these to prevent any materials from escaping from the property.

Transport Releases

FIRE HAZARD - Minimize any potentials sources of ignition that might pose a hazard.

Caution must be used to avoid creating a traffic hazard leading to an accident, or inadvertently spreading the materials by contaminating passing vehicles.

Care must be take to prevent the liquids from entering sewers / waterways.

Use sorbent materials to stop the liquids from spreading from the immediate area, ascertain if possible which drum is leaking and if possible either invert it or place it in an overpack container. Once the leak has ben stopped clean up the spill using more sorbent materials.

All employees working in the immediate clean-up area shall wear appropriate PPE consisting of coveralls, safety glasses- as well rubber boots / respirators as required.

Small spills on the roadway or paved parking lot may be cleaned up using floor dry without any lasting environmental impact.

For larger spill the clean-up of the surface area may require the operation of a vacuum truck mobile wash unit

Schedule 3

Emergency Response Capability

Size- up the spill volume and tailor the response to effectively meet the hazards.

Floor Dry used in conjunction with **Hand Tools** such as push brooms, squeegees, shovels, dustpans, should be adequate for small spills.

There are **Booms / Overpack Drums** readily available on site to contain leaking drums

Larger Spills may require vacuum truck operators & labourers, these additional personnel are on call through the normal pager call out system for an after hours response . **(1- 902-468-8848)**

Emergency Plan Activation

- Notify the response team leader
- Tend to any medical emergencies
- Notify appropriate authorities
- Ensure site is physically safe without moving hazards, minimize ignition sources, and restrict access to only essential personnel
- Take action to prevent size of spill area from increasing & contain spill
- Assemble all required equipment for the clean-up
- Isolate leaking drum (s) & prevent further leakage by using an overpak or transferring materials
- Remove other drums from the immediate vicinity of the spill area
- Clean-up any residual materials & place along with any used sorbents in a drum for shipment

6. Site Restoration

After stopping leak, sweep up all used sorbent materials. The concrete floor or the asphalt surface in the compound may be pressure washed if necessary. When this is done the area may again be utilized for storing drums, with no environmental impact.

7. Disposal

Any contaminated materials from the spill will placed into open top steel drums and held on site to be sent along with the original materials for off-site disposal, most likely these will be channeled through our processing facilities in Toronto and Kitchener Ontario.

Schedule 3

8. Resources

Quantex Technologies Inc. - is an environmental services company who is a recognized provider of services related to spill clean-ups.

Additional resources are available 24 hrs through Atlantic Industrial Cleaners 468- 9011
Additional resources are available 24 hrs through Barrington Industrial Services 494- 5890

9. Pubic Relations

The response team leader is authorized to discuss the spill with authorities concerned with the clean-up of the spill.

In the event of a serious incident any press releases will be handled through our company president, Mr Steve Milligan.

10. Reporting

Quantex operational policy dictates that an incident report form must be completed to summarize the events surrounding any incidents resulting in either a‘ near miss’ or a spill.

In the event of a significant spill occurring a formal report will be completed and this shall be signed off by the company president, Mr Steve Milligan.