

**REGISTRATION PURSUANT TO
SECTION 43.4(B) OF THE ENVIRONMENTAL
ASSESSMENT REGULATIONS 2000**

**BilRoc Building
Donovans Industrial Park
Mount Pearl, NL**

June 27, 2005

Proponent:

(i) Name of Corporate Body:

BilRoc Industries Limited

Address:

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(i) Principal Contacts for the Purpose of Environmental Concerns:

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The Undertaking:

(i) Nature, Purpose & Rationale for the Undertaking:

BilRoc Industries Limited has been actively carrying on business in chemical distribution since 1991. Over the ensuing period the proponent has carried out pilot projects in partnership with the National Research Council (“NRC”) and several reputable chemical manufacturers located throughout Canada. BilRoc proposes to expand its operation by constructing a building for mixing chemicals and reconditioning shipping drums. The project will be located in Donovan’s Industrial Park, Mount Pearl NL. The finished chemicals are used in food preparation facilities to clean, sanitize and disinfect processing

equipment. Concentrated chemicals will be diluted with sanitized water from a reverse osmosis water filtration system.

Such an undertaking will establish an industry specific manufacturing capability closer to Eastern Canadian and European markets and help create skilled technical expertise and employment opportunities locally. The facility will offer chemical and equipment training and demonstration components to assist food plant personnel. The drum re-cycling program will lessen waste disposal in landfill sites which is good for the environment and container re-use offers economic benefits to the food plant.

Included in the project is development of an ISO 9001-2000 Quality Assurance Program to be implemented during the first 18 months of operation. An external consultant will be used to accomplish this.

(ii) Geographic Location:

5 Panther Drive
Donovan's Industrial Estates
Mount Pearl NL

The map titled "Site Location Plan" is attached.

(iii) General Description of site and building and business activity:

- **Site Development** - The attached "Surveyor's Certificate" shows the proposed location of the site.
- **Construction Standards** - The proposed building and site development, refer "Site Plan 5 attached" for particulars, will be constructed to meet and comply with all required building codes and standards. The structure will comprise a 10,000 square foot concrete slab on grade pre-engineered steel structure with 24 ft clear ceiling height containing 8000 sq ft for manufacturing, drum re-cycling and warehouse requirements and a 2 storey 4000 sq ft office/showroom section located in the front of the building. The manufacturing space will include a structural steel mezzanine floor for staging and mixing chemical products (refer proposed "Mezzanine floor plan", 4 pages, copy attached)
- **Description of products to be stored, methods used, containment equipment procedures**-At any given time we will store a maximum combination of 500 UN APPROVED- 20L plastic pails, 205L plastic drums and 1000L plastic totes of finished product. In addition, we will store a quantity of "ingredient" chemical products for manufacturing. These are packaged in 50lb bags and/or sealed 205L drums and 1000L steel reinforced plastic totes. Stored products will arrive at our loading

dock via accredited national freight carriers from Canadian chemical manufacturers. The products will be off-loaded by forklift and placed on steel racking in the warehouse. Warehouse traffic lanes and the steel racking will be configured in such a way as to permit safe and organized off-loading and the racking will conform to industry guidelines to support the weight of the containers i.e., 50, 500 and 2500 lbs respectively. When required, the stored containers will be shipped to customers or poured in smaller containers and shipped to customers or moved to the mixing plant location to be used as ingredients to manufacture other chemical products. Refer to "Site Plan 5" to see location of mixing plant and re-conditioning work area. The physical mixing plant is isolated from other areas of the building and it does not contain a storm sewer drain. Note the mezzanine is constructed with safety of workers in mind. Further, a concrete block footing enclosing the perimeter of the 400 sq ft mixing area will provide secondary containment in the unlikely event of a spill during the mixing procedure. During mixing, the powdered or liquid ingredients will be blended with water in a 2000 liter plastic or stainless steel mixing vat and poured into empty containers. All manufactured products will be stored in the racking for future sale and delivery to end users. Most chemical ingredients/products will arrive at our warehouse in a liquid form and as such the risk of pollutants being carried by the wind to surrounding properties is very low if not non-existent. The powdered chemicals/ingredients will arrive on a wooden pallet which is plastic shrink wrapped. Our warehouse team will be trained to work within the confines of our "emergency response & clean up procedures" program. This program will mirror the plan currently utilized by our major chemical supplier and working partner. Our manufacturing facility will not have a floor drain, instead in the unlikely event of a spill, we will contain and neutralize it, i.e., if the spill is solvent based we would neutralize it with soda ash (sodium carbonate). Soda ash is a powdered raw material used as a buffer to decrease and neutralize acid. Soda ash is also a "great absorbent". Should the spill be alkaline in nature we will add water and clean the floor or if the spill is large we will neutralize it by adding powdered citric acid. We will comply with "environmental control water & sewage regulations" prior to disposal of any waste material. Rubber gloves, safety glasses and a face mask will be worn during this procedure. Our plant manager will regularly conduct safety training exercises in order to maintain a high level of worker readiness and safety in the unlikely event of a spill. Please refer to "raw materials to manufacture specialty chemicals" product list attached for complete list of products received, stored and mixed---the list includes TDG classifications and WHMIS information. Appended to the list are requisite *Material Data Safety Sheets (MSDS) *additional copies of Material Safety Data Sheets are available upon request.

- **Drum Re-cycling Program** - The re-cycling of drums lessens reliance on landfills where in some cases adequate facilities do not exist. The drum re-cycling program must be approved by the Federal Department of Transport. For the past 7 years we ship empty UN APPROVED 205L plastic drums to a manufacturer who fills the drums with Sodium Hypochlorite solution. The filled drums are returned to us, off loaded into our warehouse and sold to end users. When our customers use the product up the empty drums are returned to us for re-conditioning. The re-conditioned empty drums are then shipped back to the manufacturer and this cycle continues. The drums are color coded and are for “dedicated use” only, i.e., no other chemical type is placed in these drums other than Sodium Hypochlorite, for example. We maintain a log to ensure the drums are properly re-conditioned and to ensure the recommended useful life of the container is not exceeded. We will utilize semi-automated drum wash equipment to wash the drum with all lids securely installed, and we will confirm drum integrity visually and check for any leaks by inserting air and immersing the drum in the wash water. The drum is re-labeled and stored in our warehouse for future use. In the future we will purchase product in 1000L totes to manufacture product and utilize varied package sizes, mostly 205L and 20L plastic containers to package finished product. Those will be color coded as well, indicating chemical type, and will not be re-filled with chemicals outside the chemical type. The wash water will contain mostly “gross dirt” and label remnants from the exterior of the container however the wash water will be tested for chemical concentration prior to any disposal. All such disposal will comply with “**environmental control water & sewage regulations**”. Sodium Hypochlorite which is used widely in households and institutions is diluted in laundry wash water or for disinfecting at low concentrations i.e., 5-10ppm and it is flushed into our City drains...we will employ the same procedure although we will test the chemical residue in the wash water to ensure it does not exceed acceptable levels. With respect to chemical types, other than Sodium Hypochlorite, if, uncontaminated at user site, we will add the chemical residue in the container into fresh chemical batches of finished product to eliminate external disposal issues.

Construction:

a. Construction Schedule:

The site will be developed and the building constructed by the summer/fall 2005.

b. Construction Activities

The construction activities associated with this project will be no different than any other office or warehouse constructed in NL. The activities include:

Surveying
Excavation & Filling

Water & Sewer
Pavement
Concrete & Masonry
Steel
Architectural Finishes
Mechanical Services
Electrical Services

c. Potential Sources of Pollutants:

The potential sources of pollutants during the construction period would be no different than those encountered on other construction projects in NL. The Contractors involved with construction will be required to adhere to Environmental regulations for the disposal of all materials. The requirements for inspection of heavy equipment for hydraulic fluids or hydrocarbon leaks and the removal of earth prior to driving on pavement will be as per the City of Mount Pearl regulations.

Operation:

The expected life of this operating facility is a minimum of 25 years. The practice of manufacturing chemical detergents is a “proven technology”. The finished products are used widely in food processing plants, to disinfect inflow water for microbial control where the water may or may not come in contact with the food and to clean and disinfect plant floors and processing equipment. Use of such chemicals in food plants requires prior approval by the Canadian Food Inspection Agency (CFIA), you can visit their web-site @ www.inspection.gc.ca, for more information. All chemical products manufactured for food plant use in Canada must be pre-approved by the CFIA and such approval is granted only after extensive analysis of the ingredients used and the label claims. The CFIA employs inspectors who visit all food plants on an on-going basis and they strictly enforce compliance to label claims. In addition to CFIA approval, chemical products sometimes require prior approval by Health Canada , as evidenced by a DIN # (Drug Identification Number) clearly indicated on respective label. In any event, all products require the manufacturer to provide a Material Safety Data Sheet “MSD Sheet” which among other data thereon, lists all “hazardous ingredients”. The MSD sheet lists a 1-800 telephone # to call for expert assistance in the event of accidental exposure affecting humans, animals or the environment.

a. Potential Source of Pollutants:

Potential sources of pollutants will be limited to those components which will be used in our manufacturing, re-conditioning and re-cycling of drum programs. Sodium Hypochlorite is also referred to as “bleach” ...one purchases bleach at

Wal-Mart etc., under the brand name “Javex” or “Old Dutch” which contains a 3-5.25% concentration of sodium hypochlorite...the process state of the product we deal with is the same product type but only in a higher concentration when packaged. The components arrive on site in sealed containers and are stored in the warehouse unopened. As required, containers are moved by forklift to a staging area for pouring/blending into smaller size containers as the case may be. During the manufacturing process should a spill occur, it will be cleaned up by highly trained, “in-house”, workers and disposed of as per municipal guidelines. During any clean up workers will adorn proper safety equipment including face masks, eye & hand protection apparel and safety boots. Potential odors and liberated powdered chemical dust created during the manufacturing process will be minimized by installing air scrubber equipment in strategic locations in the plant. This equipment will filter out the dust and help eradicate odors caused when containers are uncovered and/or mixing is in progress. All plant workers will wear safety glasses at all times and will wear dust masks and rubber gloves during mixing and reconditioning of drums procedures.

- **List of Products to be Stored in Warehouse**

See list attached labeled “raw materials to manufacture specialty chemicals” and refer to Material Safety Data Sheets (additional copies available upon request).

b. Operation:

Certain products to be used in the manufacture of chemicals will be delivered by transport in mostly 1000L totes in sealed containers. Other powdered products will be delivered to us on a shrink wrapped, wooden pallet. All products will be stored, unopened, in the warehouse. When required these products will be moved by forklift to a staging area i.e. steel mezzanine with safety fence surrounding it, to be mixed in a vat, then packaged into other containers. We will use special hoses and fittings to dispense corrosive raw products. The empty raw product container will be transferred to the re-cycling and re-conditioning area where it will be reconditioned and tested, relabeled, placed on a wooden pallet and placed back in the pallet racking slot. From time to time empty 1000L totes will be returned to the manufacturer. Upon return contents will be pored off into smaller containers which will be labeled and a new lid affixed. Finished product will be shipped to end users or stored on a pallet in a designated pallet slot in the warehouse.

The operation will employ a trained Plant Manager who will be responsible for executing the entire procedure, assisted by one warehouseman and laborer and various administrative staff.

Description of waste management practices, storage and disposal of hazardous products, packaging etcetera - BilRoc will be providing customers

with products in different container sizes, previously described, utilizing qualified carriers. All manufactured finished products will be packaged in reusable/recyclable plastic containers and for the most part in liquid form. Handling of products and materials is strictly governed by WHMIS & TDG guidelines. All personnel are required as a minimum to have training in WHMIS and TDG. Employees involved in the manufacturing process will adhere to strict procedural guidelines so that they are not unduly exposed to hazardous substances. We do not want to underestimate the corrosive nature of stored products and in order to lessen or eliminate risk associated thereto safety guidelines will be followed in the unlikely event of a leak or spill. It should be noted that in the majority of cases the chemical products being handled are already diluted and in liquid form which in itself reduces risks to handlers. Workers may be exposed, from time to time, to dust liberated from bagged materials but the risks they may face will be limited as well.

Estimated Shipping Schedule – This will be a year around activity depending upon market demands.

Occupations:

The occupations required to operate this facility are:

- Plant Manager
- Operations clerk
- 1 office staff
- 2 warehouse workers.

Approvals for the undertaking:

The following is a list of permits, approvals and authorizations which may be necessary for the proposed project:

- (a) Release of the Undertaking under the Environmental Assessment regulations---issued by the Minister of the Department of Environment;
- (b) Department of Government Services and Lands;
- (c) City of Mount Pearl;
- (d) Federal Department of Transport.

Funding:

This project is privately funded with assistance from the Atlantic Canada Opportunities Agency.