Manitoba **Memorandum**

DATE: June 3, 2014

TO: Tania Steele

FROM: Eshetu Beshada, Ph.D., P.Eng.
Environmental Engineer
Mines and Wastewater Section
123 Main Street
Ste. 160 Union Station
Winnipeg, Mb R3C 1A5
Ph:204 945-7023

SUBJECT: **Future Scrap Div. of Xpotential Products Inc. – Information for Public Registries**

Tania,

Please find attached the proponent correspondence related to the **Future Scrap** file (5702.00) for distribution to the public registries. The documents included are:

- May 20, 2014 letter from David Ediger, 5 pages

5 pages total

Thank you.

Eshetu Beshada, Ph.D., P. Eng.

D. Ediger Consulting Services

May 20, 2014

Manitoba Conservation and Water Stewardship
Attn.: E. Beshada, P.Eng., Environmental Approvals
123 Main St, Suite 160
Winnipeg MB R3C 1A5

Re: XPotential Products Inc., Environment Act Proposal, File No. 5702

Dr. Beshada;
XPotential Products Inc. has requested that I submit responses on the company's behalf, to the comments received by your office regarding the Environment Act Proposal noted above. This letter will address the comments that you provided to Mr. Jack Lazareck on May 14, 2014.

1. Rural Municipality of Springfield
The municipality indicated in their response that the proposed development would be considered a conditional use under the Springfield Zoning By-Law. A conditional use application was submitted by the proponent to the R.M. of Springfield on May 5, 2014.

2. Manitoba Conservation, Environmental Compliance & Enforcement

- Radiation Detector – The Acceptance Criteria being developed by the proponent will state specifically that any material that radioactive materials will not be allowed to enter the facility. In the event that the detector indicates elevated radiation levels in an incoming load at the weigh scale, the vehicle will be stopped at the entrance. Future Scrap staff will check the load with a handheld detector to identify the specific source of the activity. If the item of concern can be confirmed, the driver will be directed to leave the site, remove the item and return to the weigh scale to be checked again. If the alarm condition does not re-occur, the load will be accepted. If the specific radioactive material cannot be identified, the entire load will be rejected. It is considered to be the responsibility of the carrier or the original shipper to determine the appropriate method of dealing with any rejected materials that display elevated radiation levels.
- ASR Storage – There are no plans to enclose or cover the ASR storage pad. The proponent's previous experience with storing large quantities of ASR on the same property showed that due to the dense composition of the product, wind borne material being blown from the storage area does not occur. ASR typically has a high absorptive capacity due to the percentage of foam rubber present in the material. Therefore any precipitation falling on the storage area will be absorbed instead of running off. The proponent has chosen this option to reduce the fire risk that can occur in enclosed ASR storage units. The operating procedures for the facility will include frequent removal of ASR from the storage pad, which will keep the stored volumes at a minimum.

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3. Office of the Fire Commissioner
Section 2.8 of the Environment Act Proposal states that a Fire Safety Plan will be developed in consultation with the R.M. of Springfield Fire Department. The plan will comply with the provisions of the Manitoba Fire Code. Although the current structure at 999 Redonda does not fall within the scope of the current proposal, the proponent has made note of the comments from the reviewer.

4. Manitoba Conservation, Water Control Works and Drainage Licensing Section
The proponent will be hiring a design consultant specializing in scrap metal operations to complete the details of the facility configuration once an Environment Act Licence is issued and the terms of the licence have been reviewed. Once the facility design is completed, the department will be consulted on the requirements for licensing under the Water Rights Act.

Approvals for any new access points from Redonda Street to the facility will be obtained from the R.M of Springfield.

The proposed development does not require drainage or alteration of any existing wetlands.

5. Concerned Citizens in the Springfield Commercial Area
The letter submitted by Mr. Matheson on behalf of this group covers a wide variety of issues. This response will attempt to address the environmental concerns described in the letter. It appears that some of the issues presented relate more to community standards and land use that presumably would be addressed under legislation other than the Environment Act.

- Noise Pollution – Section 5.1.1 of the Environment Act Proposal identifies the diesel engines powering the shredder infeed crane and the cyclone fan as the primary sounds sources on the site. Current literature dealing with noise levels from heavy construction equipment states that sound levels from diesel-powered equipment are in the order of 80 to 85dBA at 15 metres from the equipment. Data from the State of Washington Department of Transportation indicates that sound levels at this level would dissipate to approximately 70 dBA at a distance of 300 metres for an outdoor receptor. Based on a review of recent satellite images there are no occupied commercial structures closer than 300 metres to the proposed shredder area.

  The letter refers to the requirement for the protection of workers exposed to elevated noise levels in the workplace. Under Section 12 of the Manitoba Workplace Safety and Health Regulations, continuous noise levels must be kept below 85 dBA. Based on the data provided in the previous paragraph there does not appear to be a realistic threat to the hearing of workers on nearby commercial properties as a result of the levels projected to be produced by the proposed development.

It is anticipated that a licence issued for the Future Scrap facility would contain the standard noise nuisance clause. In the very unlikely case that enough legitimate complaints are received by the Manitoba Conservation to invoke this clause, the proponent will cooperate with the department to address any concerns.

The owners of the proposed development were previously involved with a similar operation in the same area and they do not recall receiving complaints regarding noise level concerns, with the exception of incidents involving explosions with the shredder. This situation is addressed in section 5.1.2 of the Environment Act Proposal.

- Traffic – The Environment Act Proposal did not discuss traffic safety as it was assumed that this issue would be addressed by a different local or provincial authority, if required. The access routes to the proposed Future Scrap facility are designated truck routes on paved roads through primarily industrial/commercial areas.

- Air Emissions – Section 5.2 of the Environment Act Proposal identifies two sources of airborne particulate emissions and provides proposed mitigation measures for both. It is assumed that a licence issued for the Future Scrap facility would include at least the standard air emissions clauses to ensure that air quality is not adversely affected.

  Scrap metal shredding is not generally identified as a significant source of Volatile Organic Compunds (VOC). The development of effective Acceptance Criteria and the process for depolluting vehicle hulks prior to shredding provide additional safeguards against VOC emissions.

- Fire Emissions – While no industrial facility can provide a 100% guarantee that a fire will never occur, all reasonable precautions must be taken to minimize the fire potential and ensure that effective procedures. The Environment Act Proposal outlines the steps to be taken for fire safety at the Future Scrap facility. As stated in item 3 above, a Fire Safety Plan that complies with the Manitoba Fire Code will be developed in consultation with the Springfield fire Department. Specific items to be implemented to minimize fire risk include:
  - Use of Fire Code compliant containers for storage of flammable liquids
  - Minimizing the volume of Auto Shredder residue (ASR) stored on site
  - Arranging 24 hour site security

- Storage of Batteries – The details for the proposed method of storing lead-acid batteries on site is included in the Dangerous Goods Handling and Transportation Act Proposal which was submitted to Manitoba Conservation on April 1, 2014. Batteries will be stored on pallets on an asphalt pad and will be covered. Precautions will be taken, using accepted industry practices to ensure that any acid leakage from a stored is contained. No battery

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breaking will occur on site and, therefore, there is virtually no opportunity for lead to impact the soil or water. Spill kits will be kept on site to contain and neutralize any acid spills.

- Carcinogens in Plastics and Rubber Tires – The concerns expressed in Mr. Matheson's letter relate to the situations where plastics and tires are involved in a fire. The procedures being proposed to address any fire concerns have been discussed earlier in this response. Plastics and rubber are only removed from vehicles in the shredder. This material will be found in the ASR, which will be stored outdoors on a paved pad pending removal from the site on a regular basis. No other storage of plastic or rubber will occur at the facility.

- Asbestos Storage – Asbestos from vehicle brakes will be produced during the shredding operation will be one component of the ASR. The ASR storage method described previously in this response will ensure that the potential for contaminants in the ASR, including asbestos, to enter local run-off is minimized. Long-term storage of by-products from the operation of the facility is not being proposed.

- Storage of Fuel and Oil – Storage methods for fluids removed from vehicles are described in the Dangerous Goods Act Proposal referenced previously. Flammable and combustible liquids will be stored in tanks and containers that meet the requirements of the Environment Act and Manitoba Fire Code. Spill absorbent supplies will be kept on site to ensure immediate containment and recovery of any spilled fluids.

- Contamination of Aquifers – Section 4.4 of the Environment Act Proposal states that the site of the proposed facility is not in a groundwater pollution hazard area, according to a Manitoba government report. The site is underlain by approximately 11.5 meters of clay, which minimizes the risk to groundwater from any contaminant releases at surface. In addition, any areas where products that could potentially impact groundwater quality are being stored or handled will be paved and contained to prevent the inadvertent release of a contaminant.

- Environmental Impact of Fires – The issues regarding air emission during a fire have been discussed previously in this response. During or immediately after a major fire in a facility where hazardous materials are stored, the regulatory agency will typically determine if run-off water needs to be contained and sampled prior to discharge. It is expected that this decision would be made on a site-specific basis if a fire were to occur at the Future Scrap facility.

- Leachate Moving Into Ditches – The final design of the facility will include containment systems for any run-off that may potentially be impacted by contaminants on the site. The

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details of the containment system will be finalized once the terms of the Environment Act licence have been issued. The containment system is being developed to ensure that contaminants are not introduced into the local drainage system. The system will be sized to accommodate spring run-off and major weather events.

- Wind Blown Debris – The type of material to be handled at the Future Scrap facility generally does not include light products that can be moved by winds. The proponent will employ good housekeeping practices to ensure that any litter on the site is cleaned up before it can be blown onto neighbouring properties.

- Rodent Infestation – The potential for rodent harbourage is a common concern at many commercial and industrial sites. There is nothing unique in the design of the Future Scarp site that will make it more susceptible to this situation. If rodents are detected on the site, standard extermination methods will be used.

- Aesthetics – The outward appearance of the facility has not been addressed in the Environmental Act Proposal as this was thought to be more of local land use issue to be considered by the local authority. At this time it is anticipated that the auto wrecking yard will be similar in appearance to the other similar operations in the vicinity, subject to any conditions imposed in the conditional use permit by the R.M. if Springfield.

- Development Agreement Issues – Since this particular land use consideration was not part of the Environment Act, we feel it would preferable to have the local planning authority comment on this issue.

I trust this provides adequate information in response to the issues raised by the various commenters. Please contact me if any additional clarification is required.

Sincerely,

David Ediger, P.Eng.

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