# **Environment Act Proposal Form**



Name of the development:		

Neepawa Gladstone Co-operative Limited - Neepawa Agro

Type of development per Classes of Development Regulation (Manitoba Regulation 164/88):

CLASS 1

Legal name of the applicant:

Neepawa Gladstone Co-operative Limited.

Mailing address of the applicant: Box 879

Contact Person: Brian Hedley

City: Neepawa Province: Manitoba Postal Code: R0J 1H0

Phone Number: 204-476-2328

Fax: 204-476-3363

email: gmb.hedley@neepa

Location of the development: RM of North Cypress - Langford

Contact Person: Brian Hedley

Street Address:

Legal Description: NW 26-14-15 WMP1

City/Town:

Province: Manitoba

Postal Code: R0J 1H0

Phone Number: 204-476-2328

Fax: 204-476-3363

email: gmb.hedley@neepa

Name of proponent contact person for purposes of the environmental assessment:

Brian Hedley, General Manager

Phone: 204-476-2328

Mailing address: Box 879

Fax:

204-476-3363

Neepawa, MB, R0J 1H0

Email address: gmb.hedley@neepawagladstonecoop.com

Webpage address: n/a

March 14, 2016

Signature of proponent, or corporate principal of corporate

proponent:

Printed name

# Neepawa/Gladstone Co-operative Ltd Neepawa, Manitoba

# Application for new Neepawa Agro site.

## Introduction and Background

Neepawa/Gladstone Co-operative Ltd plans to develop a new Ag retail location to better serve the farm customers in the Neepawa Co-op trading area. The land is currently being used as agricultural land.

The Neepawa/Gladstone Co-operative Ltd currently operates a Crop Supplies retail business (Neepawa Agro) under 2 separate Environmental licenses. Environmental License #3031 for an Anhydrous Ammonia operation, as well as Environmental License #1583R for the operation of Chemical storage warehouse and Dry Fertilizer blending facility. The plan is to develop this new property over a period of time and eventually operate these services, along with additional services, from this new location.

Services to be included at this proposed development will be an chemical storage warehouse, bagged seed and equipment storage warehouse, office building, key-lock petroleum facility, liquid fertilizer storage/blending plant, dry fertilizer storage/blending plant, bulk seed storage/treating plant, and anhydrous ammonia storage/plant.

No other previous studies of activities have been identified.

#### **Description of the Proposed Development**

1) A certificate of Title showing the owner and legal description of the land upon which the development will be located is attached. A copy of the signed "offer to purchase" land agreement between the registered owner, Richard Allan Sumner, and Neepawa/Gladstone Co-op Ltd. Is available upon request. This agreement outlines that once certain conditions (Environmental Approval and Subdivision approvals) are met, then the transfer of title to Neepawa/Gladstone Co-operative Ltd will take place. Also attached are maps showing Surrounding structures, rail lines, etc.

Description of property:

NE corner of NW 26-14-15 WPM1, RM of North Cypress - Langford

Registered owner: Richard Allen Sumner

- 2) All mines, minerals, and special reservations as reserved in the original grant from the Crown.
- 3) Directly South and West of the proposed development, the land is currently used as agricultural. North of the development is Provincial Highway # 16. East of the proposed development, the land is leased by Neepawa/Gladstone Co-op and is currently being used as an anhydrous ammonia storage / pumping facility. There will be no changes in the current adjoining land uses as a result of this development.
- 4) Existing land use on the site and for the adjoining land is agricultural. The RM of North Cypress Langford does not have any Zoning Bylaws, thus the site is not zoned.
- 5) The first stage of the development will consist of site preparation, office building, truck scale, pole sign, chemical storage warehouse, and bagged seed / equipment storage warehouse. Continued development of the dry fertilizer warehouse/blending facility, liquid fertilizer storage / blending facility, bulk seed storage / treating facility, key-lock petroleum facility, along with a shop, will occur over 1-5 years after the initial development. This will be determined by both need of the customer base, along with the financial well-being of the Co-operative business itself.

Hours of operation for the site will be year-round, Monday to Saturday, 8:00am to 5:00pm, with extended hours during the spring and summer rush seasons.

Office building will be a  $60' \times 60' \times 16'$  metal sided building that will meet commercial code.

Pole sign and truck scale will also be installed as per the site plan

Bagged seed / Equipment warehouse will be a 60' x 120'x 16' metal sided, pole shed with a gravel floor. Maximum number of pallets would not exceed 450.

The chemical storage warehouse will be a 60' x 120' x 16' metal sided, stud-framed building on a concrete floor. The structure will have a 6" curb around the perimeter of the building along with a 1 hour fire rating on the walls (drywall). The floor and perimeter berm will be treated to render it impervious to liquid in case of a chemical spill within the warehouse. The entire structure, along with a containment berm surrounding the entire structure, will consist of compacted clay in order to contain any runoff in the event of a fire within the warehouse. This containment area will protect the sub soil from any potential contamination. A control mechanism will be included in the containment area to allow the removal of any rain accumulations, but will remain closed at all other times. Any release of product and/or contaminated fire water will remain on site and cleaned up accordingly. A 24-hour monitored burglar and fire alarm system will be installed in the facility along with proper lighting and ventilation to ensure a safe working environment. The facility will meet AWSA warehousing

standards, both for the physical structure and the safe operating procedures outline in the Audit protocols.

Products stored in the chemical warehouse will consist of herbicides, fungicides, seed treatments, and insecticides. Maximum number of pallets will not exceed 450, and will be stored in accordance with Fire code regulations.

Once this chemical warehouse is constructed and approved under AWSA warehousing standards, we plan to de-commission the current chemical storage warehouse that Neepawa/Gladstone Co-op currently operates at #290, Highway #5 North in Neepawa, MB under AWSA approval #341248.

The "Future" Liquid fertilizer storage / blending facility will be constructed according to environmental specifications and will be constructed with a secondary containment system incorporating a permanent metal berm with an impervious liner. The containment berm will have a minimum capacity of 110% of the largest storage tank contained including the tanks displacement. The facility will consist 0f 4 x 16' wide liquid storage tanks, with a maximum capacity of 200mt of product. Loadout and inloading will occur on a sloped concrete pad to contain any spillage and prevent any sub soil contamination. Maximum stored inventory would be 800 mt of Liquid Fertilizer.

The "Future" dry fertilizer storage / blending facility will consist of a 72' x 52' storage shed with a concrete floor. Blending will occur through a 6 fertilizer bin, volumetric blending system. In-loading will occur inside the fertilizer storage shed with product being transferred to the proper bins through a closed leg system. Any spillage can be swept up inside the shed, thus preventing any soil contamination. Blending also consists of a closed auger system with an overhead bin to loadout in customer trucks. The loadout are will also occur on a concrete pad to allow for clean-up in order to prevent any sub soil contamination. Since the entire system is a closed system, air pollution due to dust is at a minimum. (See attached plan). Once this facility is operational, we plan to de-commission the current dry fertilizer storage / blending facility that Neepawa/Gladstone Co-op currently operates at #290, Highway # 5 North in Neepawa, Mb. Maximum stored inventory would be 4000 mt of dry fertilizer.

The "Future" key-lock petroleum station will consist of 2 above ground, double lined, steel petroleum storage tanks, along with approved plumbing and 2 pumping stations.

The "Future" bulk seed storage / treating facility will consist of 4 steel bins, an under bin and outload conveyor system, along with a USC seed treater and scale. The facility will also be constructed on concrete to ensure proper cleanup of any spillage. The seed treater, in addition to the concrete pad, will also have its own impervious containment system to collect any seed treatment spillage that may occur. The operation and physical construction of the bulk seed storage / treatment facility will also meet the AWSA standards and audit protocols that have been established.

The "Future" anhydrous ammonia storage / pumping facility will consist of 2 x 18000us gallon bulk storage tanks mounted on a common steel foundation. 2 x anhydrous ammonia approved pumping units along with a fill island located on the West side of the storage tanks, make up the transfer apparatus for filling nurse tanks and delivery trucks. Neepawa/Gladstone Co-operative currently operates this anhydrous ammonia facility on leased property that is located directly east of this proposed development. The plan would be to move this facility onto the new development and continue operating in accordance with the protocols outlined in the current Ammonia Standards "Code of Practice". This facility and operations is currently approved under the Fertilizer Safety and Security Council's Certificate of Compliance #9412480. Maximum stored inventory would total 220 mt of anhydrous ammonia. (approx. 65 mt in the plant itself and the balance being stored in the portable anhydrous ammonia nurse tanks).

Please find attached a copy of the existing site plan

- 6) No external funding is required and/or requested.
- 7) Other licenses and/or permits that will be required include subdivision approval from the RM of North Cypress Langford. (see attached Subdivision Application). Before operations can commence for the chemical storage warehouse and the bulk seed storage / treating facility, AWSA approvals will be in place. Likewise, before operations for the anhydrous ammonia facility, approval through the current Ammonia Standards council will also be in place. Any other required permits and/or licenses will be obtained as need be.
- 8) There has not been any public consultations undertaken in conjunction with project planning, thus no results are known.

# Description of Existing Environment in the Proposed Development

- 1) The facility is located on landscape that is slightly rolling. Drainage from the facility is good (see attached topographic survey map). The nearest river and/or body of water is located approx 3 km to the SW of the proposed development. The Town of Neepawa is located approximately 3 km to the West of the proposed development. (See attached Google Earth maps).
- 2) Prevailing climate conditions are conducent to Manitoba weather conditions. Spring thaw beginning in April with ground freeze up occurring in November.
- 3) Lake Irwin and the Whitemud River are the closest surface water bodies, both located approx 3 km to the southwest of the facility. See attached Google earth maps.

The description of the regional groundwater conditions are shown in the attached local area well logs. The site is not located on an aquifer.

There are no wells located on the proposed development.

- 4) Since there are no water bodies next to the facility, there have been no impacts identified on the aquatic environment.
- No impacts on the surrounding vegetation have been identified.
   With the surrounding property being mostly agricultural, no impacts on local wildlife has been identified.
- 6) No impacts on any endangered species and/or habitats have been identified.
- 7) Land use in the area is predominately used for agricultural purposes.
- 8) No long term public health risks have been identified as a result of the proposed development.

There are not any protected areas such as national or provincial parks identified within the vicinity of the proposed development.

There are not any heritage resources that have identified within the vicinity of the proposed development.

There are not any indigenous communities identified within the vicinity of the proposed development.

# Description of Environmental and Human Health Effects of the Proposed Development

- No impact on the biophysical environment, including wildlife, fisheries, surface water, groundwater, and forestry resources have been identified. See attached well logs.
- 2) The identified pollutants that may be released at the proposed development, along with the procedures to contain or treat the waste are outlined below.

Potential spillage of dry fertilizer at the proposed dry fertilizer storage/blending facility may occur during either in-loading or out-loading operations. To ensure that this spillage is contained and cleaned up, all in-loading and out-loading operations will occur on a concrete pad. Thus eliminating any potential sub soil contamination. As well, since in-loading and blending are both done in a closed system, dust pollutants released into the atmosphere are at a minimum.

The crop protection storage warehouse will also contain safety protection to prevent any release of pollutants into the environment. Firstly, all products that are resold at the warehouse to customers, will be shipped in the same container that they were received in. (ie No chemical mixing or bulk container loading will occur at the facility). Secondly a retention berm will be constructed around the inside of the warehouse and both the berm and the floor will be treated to render them impervious to any liquid. Thus any spillage within the warehouse resulting from leaking containers can be contained. Finally, a containment area constructed of compacted clay will surround the entire warehouse to contain any run-off in the event of a fire. This secondary containment along with the primary containment berm will be capable of holding the sum of the total potential inventory and firefighting water used by the local fire department. All employees will be properly trained for their specific job requirements as outlined in the AWSA audit protocols highlighting training requirements. Any spillage will be cleaned up in accordance to the MSDS for the product and any hazardous material will be disposed of in the proper manner. Neepawa Agro currently operates an approved ASWA chemical warehouse operation under AWSA approval #341248. Similar safety, operating and training procedures will be used for the operation of this facility, once constructed.

Potential spillage of liquid fertilizer at the proposed liquid fertilizer storage/blending facility may occur as a result of damage or leakage from one of the storage tanks. In order to prevent any sub soil contamination, a secondary containment system will be installed using a metal berm connected to an impervious liner to contain any spillage. The containment area will be large enough to contain at least 110% of the largest tank capacity in the facility. Minor spillage may also occur during the in-loading and outloading operations at the Liquid fertilizer facility. Both operations will occur on a concrete pad that is sloped to contain any spillage. The spillage can then be cleaned up and disposed of before any sub soil contamination can occur.

Anhydrous ammonia being released (i.e. Bleed-off) during the de-coupling of the nurse tanks, and/or delivery trucks, with the bulk pumping facility, is contained in a tank of

water labeled "bleed water". With anhydrous ammonia's high affinity for water, the product is completely absorbed into the bleed water. The bleed water is then properly disposed of at the end of each application season. Thus there are minimal pollutants being released into the atmosphere.

In the event of an accidental release of anhydrous ammonia, the activation of the attached Emergency Response plan lists out the details to control the release, as well as a plan to ensure safety to employees, the general public, and the environment. See attached ER plan and the Emergency Water Containment plan.

3) Hazardous waste is produced in 2 ways at the anhydrous ammonia facility. One is through the bleed-off process, which results in contaminated Bleed Water; and the second is in the event of an accidental release. See attached "Bleed-off water disposal procedure" and "Emergency Water Containment Plan" to answer any questions regarding the disposal of hazardous waste at the facility.

Any spillage of crop protection products will be cleaned up, stored, and then disposed of according the product's MSDS recommendations.

- 4) The only gasoline and diesel fuel that will be stored on the proposed development will be for re-sale through the proposed key-lock petroleum facility. Both products will be stored in approved double-walled, above ground, petroleum storage tanks. Daily inventory checks will be done to ensure that the tanks are not leaking.
- 5) No impacts on heritage resources have been identified at the proposed development.
- 6) No socio-economic implications resulting from environmental impact have been identified. No climate change implications as a result of the operation of the facility have been identified.
- 7) One potential impact to human health and safety resulting from the release of pollutants would be in the event of an accidental release of Anhydrous Ammonia. As mentioned above, an Emergency Response Plan is in place that lists out the details to control the release, as well as a plan to ensure safety to employees, the general public, and the environment. See attached ER Plan.

All other releases resulting from the operation of the proposed development can be terminated and cleaned up as to prevent any serious human health and safety issues from arising.

8) No impact on Indigenous communities, their resource use, and their cultural or traditional activities have been identified as a result of the proposed development.

## Mitigation Measures and Residual Environmental Effects

 A description of the proposed environmental management practices to be employed to prevent or mitigate adverse implications from the impacts identified above, are as follows;

With regards to the crop protection storage warehouse, all products are resold in the same container that they arrive in. (no mixing or bulk container loading will occur). A primary containment berm around the inside of the warehouse, along with a floor treatment to render both the berm and floor impervious to any liquid spills, will be constructed into the development. A secondary containment constructed of compacted clay will surround the entire warehouse to contain any firefighting water that may collect in the event of a warehouse fire. As well, the warehouse will have a 24 hour fire and burglar alarm monitoring system installed. The storage warehouse will be constructed using metal siding along with a 1-hour fire rated interior walls to help contain any potential chemical fire that may occur. Any spill cleanup will be done according to the recommendations of the product's MSDS.

Dry fertilizer in-loading and out-loading will occur on concrete to ensure that spilt product can be cleaned up before any pollutants are released into the sub soil.

A metal berm and an impervious liner will be installed on the liquid fertilizer storage facility to collect any spillage resulting from damage or leakage from the storage tanks, from entering the sub soil on the proposed development. As well, in-loading and outloading will also be constructed to ensure that these operations are done over a sloped concrete pad to contain any product spillage.

With the anhydrous ammonia being stored is approved pressure vessels, minimal environmental impacts have been identified. The bulk storage vessels undergo an M10 hydro testing by an approved hydro-tester to ensure the integrity of the tanks are good. All the nurse tanks are regularly inspected and hydro tested according Transport Canada's B620 regulations to ensure safety and the integrity of each pressure vessel.

In case of major damage to either the facility or nurse tanks within the proposed development, due to natural disaster, vandalism, or fire, the Neepawa Fire Department, and the RCMP would be first responders. The Manitoba Department of Conservation would also be contacted.

Clean up of any accidental spillage would be done in accordance with the procedures from the supplier and disposal of contaminant with environmental guidelines set out by the Manitoba Department of Conservation.

All employees must follow the developed operating procedures in order to prevent or mitigate adverse implications that may result from the operation of the facility. All personal are trained on a regular basis for their specific job requirements including safety in handling product, use of emergency response and personal protection equipment, MSDS training, and what their obligations are in the event of any emergency that may arise at the proposed development.

Upon decommissioning of the site, soil samples will be taken to ensure that there are no contaminants still remaining on the proposed site. Any contamination found will be remediated as required for that particular product in accordance with any environmental guidelines set out by the Manitoba Department of Conservation.

- 2) Residual environmental effects will be minimal after the application of mitigation measures. The safety equipment built into the new facility along with the continued monitoring of the operation, as required by the Anhydrous Ammonia Code of Practice Audit as well as the AWSA Warehousing Audits, has and will continue to have minimal ill-effects on the environment. Thus environmental restoration and rehabilitation of the site upon decommissioning would also be minimal.
- 3) The anhydrous ammonia storage vessels along with the anhydrous ammonia nurse tanks have all been upgraded to the most current safety equipment available. The facility and the operation will hold a current certification with the Ammonia Standards program that requires the facility install the recommended safety equipment along with implementing a stringent safety training program and operations procedure to ensure safety for all involved; including protection of the environment.

The crop protection warehouse will also implement the most current containment and monitoring systems available. The warehouse and the operation will hold certification with the AWSA warehousing Audit protocols that requires the installation of safety equipment along with implementing a stringent safety training program and operating procedures for all involved.

The dry fertilizer and Liquid fertilizer facilities will also have the most current containment and construction plans implemented to ensure minimal effects on the environment.

## Follow-up Plans, including Monitoring and Reporting

Obtain the required subdivision approvals from the RM of North Cypress – Langford.
 Obtain the required building permits and approvals from the office of the Fire
 Commissioner, prior to any construction.

Obtain new AWSA certification approvals for the chemical storage warehouse. Complete a re-audit of the chemical warehouse every 2 years as required by the AWSA warehousing standards program.

Obtain the Ammonia Standards Program certification for the anhydrous ammonia operation.

Complete the Anhydrous Ammonia Code of Practice re-audit every 2 years as required by the Ammonia Standards Program.

Conduct monthly inspections required under both the AWSA chemical storage warehousing program and the Anhydrous Ammonia Code of Practice program.