Nutrien Ag Solutions Canada
340 Goldenrod Drive, Winnipeg, R3C 2E6 (RM of Rosser)

Introduction and Background

Nutrien Ag Solutions previously had an Access Distribution Centre located in Portage MB, which was opened July 1st, 2011, and subsequently closed on June 30th, 2020. After a detailed review of the current needs of Manitoba farmers, Nutrien Ag Solutions Canada Inc. (NAS) has determined the need for an AWSA Crop Protection Chemical Warehouse and Distribution Centre within the province. The Proposal is for a new Class I development, located on lots 1, 2, 3, 4 and 5, Plan 64621, WLTO, in SE ¼ section 34-11-2 EPM.

Description of Existing Environment in the Project Area

The legal description of the land is lots 1, 2, 3, 4 and 5, Plan 64621, WLTO, in SE ¼ section 34-11-2 EPM. The above noted parcels are zoned I2 – Industrial General, under the Inland Port Special Planning Area Regulation 48/2016, registered March 8, 2016 (Centreport Canada). The street address of the new building has been assigned as 340 Goldenrod Drive, Winnipeg, R3C 2E6, in the RM of Rosser. The Owner of the land which the development is intended to be constructed upon, is Whiteland Services, Inc., #212 - 2211 McPhillips Street, Winnipeg, MB, R2V 3M5.

The land is an industrial park known as Brookport Business Park. The adjoining lands are industrial development and the municipal roads are Brookside Blvd. and Farmer Road. The elevation of the land has been raised with imported fill. For your reference, the zoning approval, subject parcel map and site plans are included in this submission.

Proposed Development

The development work includes the construction of an approximate 100,100 square foot industrial building for the purpose of being used as an AWSA Crop Protection Chemical Warehouse and Distribution Centre, and construction of adjacent site improvements, including recessed loading docks (concrete pavement), truck maneuvering areas (asphalt pavement), and staff and customer parking areas (asphalt pavement). The new Distribution Centre will house bagged seed, bagged fertilizer and crop protection products.

Facility Description:

- The building will have total area (footprint) of approximately 9,303 m2 (100,100 ft2) and will have 32’0” clear height inside.
- The vast majority of the building will be open warehouse area designed for rack storage and pallet storage on the floor. Approximately 2,400 sf will be partitioned off from the warehouse and will include office space, staff washrooms, and a staff lunchroom.
- The foundation system will consist of driven precast piles, reinforced concrete grade beams, and a reinforced industrial concrete floor.
- The building structure will be non-combustible construction consisting of steel beams and columns, open web steel joists, and a steel roof deck.

- The building enclosure will consist of insulated metal panels with a non-combustible core, curtainwall fenestration, and a class “C” fire-rated membrane roof system.
- The building will be fully sprinklered to ESFR criteria per NFPA-13 and NFPA-30.
- Primary containment for the warehouse (less the office area and loading dock) is approximately 1,063,802 litres. Primary containment will consist of 5” high steel angles that will be bolted to the floor. The angle will be caulked to the concrete floor with sealant. Concrete ramps will be constructed over the curbs at designated locations.
- Total secondary containment is approximately 1,751,300 litres. The entirety of this volume flows through trench drains into sump pits and can be controlled by the pump controllers as noted in the narrative below. This capacity was calculated using only the area that is contained by the face of the dock wall, the two concrete retaining walls, and the top of the concrete pavement. This does not include the additional small volume of the trench drains, the pit, and the piping, as this additional capacity is negligible compared to the volume of the secondary containment.

Outside of the above noted warehouse area primary containment, the only location where a spill could occur is the loading dock area inside the building, or within a trailer that is parked in the loading dock. The loading docks are standard 1.22m (48”) height, and the dock pavement slopes at approximately 3.5% towards the building (dock) wall. Should a spill occur in the dock or within a trailer, the natural flow due to gravity, would be onto the dock pavement and into the trench drains that will be installed approximately 1m away from the dock wall.

The Brookside Business (Industrial) Park, and the surrounding municipal roads, do not have a piped land drainage system; therefore, the RM of Rosser requires stormwater retention systems, in accordance with the RM drainage plan. Storm water flow down the pavement and into a trench drain. The water flows through the trench drain to a catch basin. There will be two sump pits, one at each end of the building, which contains two duty-cycle pumps, controlled by a controller. The pump controller, which will be mounted on the dock wall beside the sump pit, has an on/off switch and an overflow alarm mechanism. If approved, the stormwater system will be used as secondary containment in the event of a spill. The storm water system will be closed at all times and will be manually opened to release stormwater after it has been confirmed no chemical spill has occurred. In the event of a chemical spill, the spill will be contained within the combination of the drains, catch basin, piping and sump pits. A remediation company would then be contacted to remove and clean up the spill. we are asking that this stormwater retention system be accepted in lieu of the compact clay berm, as the directional flow will enter the trench drains (drawing attached).

<u>Development Schedule:</u>

- Planning and design are complete.
- Construction to commence in April and should be complete in November 2021.
- Commissioning of the building and mechanical and electrical systems will take place in October and November 2021.

Federal, provincial or municipal approvals, licenses, permits, authorizations, etc.

This development requires Zoning Approval (Centreport Canada), a building permit (South Interlake Planning District), and lot grade approval (RM of Rosser). The status of these approvals are:

- Zoning approval – approved. Zoning memorandum and Zoning Variance attached.
- Building Permit – the building permit application is expected to be submitted to South Interlake Planning District (SIPD) the week of March 22. SIPD normally processes building permits within 2 weeks.
- Lot Grade approval – The lot grade plan was submitted to the RM of Rosser municipal engineer on March 5, 2021 and is in progress.

Maps, Drawings, Site Plans, etc.

A site plan showing the proposed development has been attached for Manitoba Sustainable Development's files.

Description of Environmental Effects of the Proposed Development

The NAS chemical storage warehouse will be a 100,100 square foot facility. The operations within this warehouse are broken down as follows:

- 16,640 square feet will be used for loading docks inside the warehouse.
- 2,400 square feet will be office space.
- 5,000 square feet will be tote refurbishing.
- 10,000 square feet will be empty tote storage.
- 15,000 square feet will be used for storage of empty pallets, empty jugs, and cardboard boxes.

When you take the total square footage of 100,100 sq. ft. and subtract the above (49,040 sq. ft.) this leaves 51,060 sq. ft. of storage space for pre-packaged liquid products, or 5,106 pallet positions (3,063 pallets liquid/2,042 pallets dry).

On average, the chemical storage warehouse will store at any given time 60% pre-packaged liquid products (various chemicals, multiple classes) and 40% pre-packaged dry products (Seed, Micronutrients, Granules).

Liquid product storage pallet configurations:

1,000-liter tote = 1,000 liters
450-liter tote = 450 liters
115-liter drum = 575 liters/pallet
100-liter drum = 500 liters/pallet
2 X 10-liter jugs = 720 liters/pallet
Average = 649 liters/pallet

3,063 liquid pallets x 649 liters = 1,987,887 liters in storage.

Firstly, all personnel are trained on a regular basis for their specific job requirements including safety in handling product, how to perform spill clean-up duties, how to read a SDS, and what their specific obligations are should product spillage occur.

Secondly, concrete internal containment will be constructed to prevent contamination of the ground from any potential product spillage.

Thirdly, a comprehensive stormwater system will be utilized as a means of secondary containment to prevent a potentially larger contamination of the ground and surrounding facility from any potential product spillage.

Lastly, periodic internal audits are conducted to verify site compliance with applicable regulations and company policies.

Mitigation Measures and Residual Environmental Effects

All personnel are trained on a regular basis for their specific job requirements including safety in handling product, how to use spill clean-up equipment, how to read a SDS and what their specific obligations are should a product spillage occur. This plan includes, but is not limited to, items which will address: measures implemented for product spillage minimization and prevention, including spill clean-up equipment and supplies; security; and personnel training. The plan is available at the site at all times.

All NAS sites have an Emergency Response Plan appropriate to their operating conditions that is reviewed and updated annually.

Heritage Objects

In the event that any reasonably identifiable heritage objects (including archaeological objects, paleontological objects, and/or natural heritage objects) or human remains are discovered during the ground disturbance of this construction project, an immediate stop work order shall be executed. If required, the stop work order shall ensure that the discovered object is not handled or disturbed, and immediate notification will be provided to the Historic Resources Branch. In the event that the discovery consists of identifiable human remains, this notification will also include the local RCMP.