Environment Act Proposal Form

Name of the development: 1664 Seel Avenue, Winnipeg, Manitoba, R3T 4J7	
Type of development per Classes of Development Regulation (Manitoba Regulation 164/88): Class 1 Agricultural Warehouse within the City of Winnipeg	
Legal name of the proponent of the development: CWS Logistics LTD.	Mailing address: Unit 10-75 Scurfield blvd. Winnipeg, MB, R3Y 1 P6
Location (street address, city, town, municipality, legal description) of the development: 1664 Seel Avenue, Winnipeg, Manitoba, R3T 4J7, Lot 1 Plan 23262 Parish Lot 7/10 St. Boniface	
Name of proponent contact person for purposes of the environmental assessment: Shawn Bergen	
Phone: 204-771-9977 Fax: 204-474-1583	Mailing address: Unit 10-75 Scurfield blvd. Winnipeg, MB, R3Y 1 P6
Email address: sbergen@cwslogistics.com	
Webpage address: www.cwslogistics.com	
Date: September 20, 2012	Signature of proponent, or corporate principal of corporate proponent Printed name: Shawn Bergen

A complete **Environment Act Proposal (EAP)** consists of the following components:

- **Cover letter**
- **Environment Act Proposal Form**
- **Reports/plans supporting the EAP** (see "Information Bulletin - Environment Act Proposal Report Guidelines" for required information and number of copies)
- **Application fee** (Cheque, payable to Minister of Finance, for the appropriate fee)

Per Environment Act Fees Regulation (Manitoba Regulation 168/96):

Class 1 Developments	$500
Class 2 Developments	$5,000
Class 3 Developments:	
Transportation and Transmission Lines	$5,000
Water Developments	$50,000
Energy and Mining	$100,000

Submit the complete EAP to:

Director
Environmental Assessment and Licensing Branch
Manitoba Conservation
Suite 160, 123 Main Street
Winnipeg, Manitoba R3C 1A5

For more information:
Phone: (204) 945-7100
Fax: (204) 945-5229
Toll Free: 1-800-282-8069, ext. 7100
http://www.gov.mb.ca/conservation/eal

CWS
LOGISTICS LTD.

Date: Thursday, September 20, 2012

Environmental Assessment and Licensing Branch
Manitoba Conservation
123 Main St. Suite 160
Winnipeg, MB
R3C 1A5

Attention: The Director

Dear Ms Braun,

CWS Logistics Ltd. is making an application under the Environment Act for a license to operate a Class I, Agrichemical warehouse within the City of Winnipeg. An existing warehouse is to be renovated to meet the standards set forth, and to meet the criteria set out by the Agrichemical Warehouse Standards Association.

CWS Logistics Ltd. Is no stranger to the AWSA standards, as we are certified at two locations in Alberta (Calgary and Edmonton), two in the Province of Saskatchewan (Regina and Saskatoon), and one in the Province of Manitoba (Winnipeg, which we plan to replace with this new location). CWS currently operates over 530,000 ft2 of AWSA certified space and has a clean environmental record.

Our renovations are scheduled for later this fall we and are starting the licensing process with this application. Enclosed find our application and 26 copies. The application's primarily document is contained on the enclosed memory card (Winnipeg Warehouse application.doc). The appendix includes site maps and supporting data.

We look forward to working with your team as we proceed through the application process.

Best regards,

Shawn Bergen
Executive Vice President
204 474 1339
sbergen@cwslogistics.com

ENVIRONMENT ACT PROPOSAL REPORT

CWS Logistics Ltd.
1664 Seel Avenue
Winnipeg, Manitoba

Submitted to:

CWS Logistics Ltd.
Unit 10 – 75 Scurfield Boulevard
Winnipeg, Manitoba R3Y 1P6

Attention: Mr. Shawn Bergen, Executive VP

Submitted by:

AMEC Environment & Infrastructure
A Division of AMEC Americas Limited
440 Dovercourt Drive
Winnipeg, Manitoba
R3Y 1N4

AMEC Project Number: WX1691002

7 December 2012

EXECUTIVE SUMMARY

CWS Logistics Ltd. (CWS) authorized AMEC Environment & Infrastructure, a division of AMEC Americas Limited (AMEC) to complete an Environment Act (EA) Proposal Report for the proposed chemical storage warehouse facility located at 1664 Seel Avenue in Winnipeg, Manitoba (the 'Site'). CWS requested AMEC prepare the EA report as part of their Environment Act License (EAL) application for the Site. This report was prepared in accordance with AMEC's proposal dated 29 October 2012 (AMEC proposal no. WPG2012.495).

It was reported to AMEC that the current facility at the Site was constructed in 1957 and subsequent additions to the Site building took place in 1957, 1968, 1972, 1993, 1998, and 2002. Prior to the development, the Site had been used as agricultural land. Previous tenants of the Site have included Crown Zellerbach Flex-Pak Ltd., Gravure Intel Ltd., Graphic Packaging Corp., and Sonoco Flexible Packaging. CWS is the current owner of the Site.

The Site currently consists of a large manufacturing building and a smaller detached bulk storage building. CWS proposes to renovate the existing facility to an agrichemical crop protection storage facility. CWS will apply for certification from the Agricultural Warehouse Standards Association (AWSA) following the completion of renovations and operate the facility under AWSA standards and protocols.

Detrimental environmental effects as a result of the proposed facility activities are expected to be minimal or insignificant and all potential environmental effects are expected to be further reduced through the implementation of the described mitigating measures. Table A is a summary of the environmental effects identified in the report.

TABLE A: SUMMARY OF POTENTIAL ENVIRONMENTAL EFFECTS

POTENTIAL IMPACTS			MITIGATION MEASURES
	Not a Concern	Currently Being Mitigated	
Air Quality	X		There will be no sources of air emissions from the facility, apart from standard heating and cooling equipment. It was reported to AMEC that the previous tenant (Sonoco) had an air permit relating to VOC emissions arising from flexographic printing, rotogravure printing and adhesive lamination. All equipment associated with Sonoco's printing and lamination operations has been removed from the Site and the permit will be allowed to expire.
Excessive Environmental Noise	X		Manufacturing will not be conducted at the facility. Traffic will be normal for an industrial warehousing property. The Site is located within the Fort Garry Industrial Park and the nearest non-industrial or non-commercial property is approximately 100 m from the Site.

Geology/Soils	X		Environmental assessments have identified that the soils at the Site consist of glaciolacustrine clay to a depth of approximately 9 to 12 meters (m) from grade. A deposit of silty till, typically a few meters or more in thickness, occurs between the clay and the underlying bedrock. Bedrock in this area is from the Upper Fort Garry Member and consists of cherty limestone of variable thickness and is estimated to occur at about 12 to 15 m below grade. Fractured zones in the bedrock comprise the major aquifer in the area. There are no aquifers above the bedrock. Given the substantial clay thickness, the potential for contamination of the aquifer, from on or off-site sources, is considered to be low.
Industrial Waste Effluent		X	There will be no effluent produced at the facility. Water employed to combat a fire will be contained within the chemical storage secondary containment (curbing) and will be tested and assessed individually per event to determine disposal options.
Sewage Disposal	X		The sanitary facilities from the Site are connected to the City of Winnipeg municipal wastewater system.
Chemical Storage		X	All chemicals used and stored at the Site will be effectively controlled. Storage areas will be fitted with secondary containment (curbing). Standard operating procedures and emergency response planning for chemical storage / releases have been developed.
Hazardous Materials		X	Forklift propane canisters will be stored in a storage cage outside the facility. The storage capacity will be limited to 12 canisters. Up to 10 gallons (45 L) of gasoline and up to 10 gallons (45 L) of diesel fuel for a water pump will be stored in a CSA approved flammable storage chest.
Storm water Management		X	A separate storm water sewer system is present at the Site and will be upgraded as part of the redevelopment. Currently, four catch basins are present on Site and two additional catch basins are proposed. Additionally, a storm sewer control valve will be installed on the storm water sewer system prior to the system exiting the Site.
Plants	X		The Site is located in an industrial setting with industrial properties surrounding it. There are no sensitive ecological receptors or land use within 300 m of the Site.
Animals	X		
Land-use	X		
Employment/ Income	X		It is expected that the operation of the chemical warehouse at the Site will provide employment opportunities, however the net employment in comparison to the previous tenant or operations at the Site will likely be similar

Based on the type and operation of the facility, limited potential for environmental impact and the controls that are currently in place, further follow-up plans are not required at this time. Based on AMEC's review, the importance of environmental compliance is well defined and acknowledged by CWS personnel. Company and future site documentation appears to be generally well maintained and accessible and procedures are well established. It has been reported to AMEC that the Site will be secured with perimeter fencing and well maintained and properly managed. Chemical inventory is clearly identified, will be properly located and stored, and MSDS and emergency information will be easily accessible.

In future, a site closure plan would be developed to address all the necessary environmental requirements in the event of future facility decommissioning.

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1.0 INTRODUCTION and BACKGROUND

CWS Logistics Ltd. (CWS) authorized AMEC Environment & Infrastructure, a division of AMEC Americas Limited (AMEC) to complete an Environment Act Proposal (EAP) Report for the proposed chemical storage warehouse facility located at 1664 Seel Avenue in Winnipeg, Manitoba (the 'Site'). CWS requested AMEC prepare the EAP report as part of their Environment Act License (EAL) application for the Site. This report was prepared in accordance with AMEC's proposal dated 29 October 2012 (AMEC proposal no. WPG2012.495).

The proposed agricultural chemical storage warehouse would be considered a Class 1 development under the Environment Act. The existing legislation under The Environment Act which pertains to the Site is as follows:

10(1) No person shall construct, alter, operate or set into operation any Class 1 development unless:

(a) the person first files a proposal in writing with the department and obtains a valid and subsisting license from the director for the development; or

(b) the person is exempted under the Act or the regulations from the requirements of clause (a).

CWS currently operates five agricultural crop protection chemical warehouses in Alberta, Saskatchewan and Manitoba; all certified under the Agrichemical Warehouse Standards Association (AWSA) standards and protocols. CWS proposes to relocate their current Manitoba storage operations to the Site. The current Site building would be renovated to AWSA standards and employed as an agrichemical warehouse for the foreseeable future. The main operations at the Site will include the receiving, storage, and loading and unloading of agrichemical products. An inventory of potential chemicals to be stored at the facility is included in Appendix A.

It is AMEC's understanding that CWS had previously applied for an EAL for the Site, however the application was returned requiring additional information and not being adherent to the application structure.

AMEC has based the following report on the Licensing Procedures Regulation under the Environment Act (Manitoba Regulation 163/88), specifically, the Information Bulletin – Environment Act Proposal Report Guidelines (dated January 2011) and Information Bulletin - Environment Act Proposals for Crop Protection Chemical Warehouses – Supplementary Guidelines (dated January 2009) issued by Manitoba Conservation.

1.1 OBJECTIVES

The objective of this EAP report is to provide the information requested in the MC Environment Act Proposal Report Guidelines Information Bulletin, in support of CWS's EAP under Manitoba's The Environment Act.

1.2 METHODOLOGY

The baseline environmental conditions were established previously in a Phase I Environmental Site Assessment (ESA) and Phase II ESA conducted at the Site by AMEC in 2012. Potential effects of the proposed development on these physical conditions were then assessed using

professional judgement, precedent, and similar case studies. Mitigating measures (if required) were identified to comply with legislation and to eliminate, control or minimize potential adverse effects and are to be incorporated into the proposed facility operations. If required, follow-up requirements were defined to ensure that mitigation measures are implemented and assess their effectiveness.

Environmental effects are defined as changes in the environment caused by the proposed development. However, in the case of the Site, which will be an active operation, AMEC concentrated on identifying the operational processes that could conceivably impact the environment through either normal procedural activities or from spills, accidental releases, or other unplanned acts.

2.0 DESCRIPTION OF PROPOSED DEVELOPMENT

2.1 CURRENT FACILITY DESCRIPTION

The Site is located at 1664 Seel Avenue on the south side of Seel Avenue between Otter Street and Waverley Street in the Ward of North Fort Garry and the Neighbourhood of Buffalo in Winnipeg, Manitoba. The legal description of the Site is:

- Lot 1 Plan 23262 Parish Lot 7/10 St. Boniface

According to the City of Winnipeg Citizen's Information Service, the Site is zoned as Manufacturing – General (M2). According to the City of Winnipeg Assessment & Taxation Department, the property use code for the Site is INMLM (Industrial Light Manufacturing) and assessed property size is 8.1 acres (3.28 hectares). The Site is currently owned by CWS. A Certificate of Title is included in Appendix B.

It was reported to AMEC that the current facility at the Site was constructed in 1957 and subsequent additions to the Site building took place in 1957, 1968, 1972, 1993, 1998, and 2002. Prior to the development, the Site had been used as agricultural land. Previous tenants of the Site have included Crown Zellerbach Flex-Pak Ltd., Gravure Intel Ltd., Graphic Packaging Corp., and Sonoco Flexible Packaging. Figures 1 and 2, attached, show the Site location.

The Site currently consists of a large manufacturing building and a smaller detached bulk storage building. During the Phase I ESA by AMEC, it was noted that the original building is the southwest portion of the overall Site building. This portion of the Site building included an office area on the second floor and an area for manufacturing processes on the first floor. The original portion of the building was developed on a concrete slab with concrete masonry walls and a steel frame. The main floor of the building was finished with exposed concrete floors. The roof was observed to be constructed of a mixture of wood and metal sheeting, which was reported to be finished with tar and gravel. Staining was not observed surrounding the hydraulic equipment of the elevator.

The second section of the Site building, reported to have been construed in 1968, was developed on the north side of the original Site building. The 1968 section was developed on a concrete slab with concrete masonry walls and a steel frame.

The third section of the building, reported to have been constructed in 1972, was observed to be developed on a concrete slab with concrete masonry walls and a steel frame. The flooring in this section of the Site building was observed to be exposed concrete. The wall adjacent to the 1968 section of the building was finished with metal siding, and the remainder of the 1972 section of the Site building was finished with a mixture of painted concrete block and cement board. This section of the building was observed to have a metal sheet ceiling equipped with a mixture of fluorescent and metal halide lighting.

The fourth section, reported to have been constructed in 1993, was observed to be developed on a concrete slab with concrete masonry walls and a steel frame. The flooring in this section of the Site building was observed to be exposed concrete. An exposed metal ceiling was observed equipped with metal halide lighting.

The fifth section, reported to have been constructed in 1998, was observed to be developed on a concrete slab with concrete masonry walls and a steel frame. This section of the Site building was observed to have an exposed metal ceiling equipped with metal halide lighting.

The sixth section, reported to have been constructed in 2002, and referred to as 'the warehouse area', contained five truck loading bays. This section was constructed on a concrete slab with a mixture of metal clad walls with painted gypsum board walls near the truck loading bays. This section was observed to have a steel frame and an exposed metal ceiling where metal halide and arc sodium lighting were observed. Five loading bay doors were observed during the Site visit, each with their own hydraulic lifting system. The flooring in this section of the Site building was observed to consist of exposed concrete.

The bulk storage building is located approximately 1 m south of the southeast corner of the 1993 section of the Site building. The bulk storage building, which contained three aboveground storage tanks (ASTs), was reported to have been constructed sometime between 2002 and 2004. The bulk storage building is constructed on a concrete slab with a concrete curb at the doorway to provide spill containment. The walls are masonry block with an explosion-proof southern wall as reported by site personnel. It was reported that the roof consisted of steel decking with a tar and gravel finish.

The exterior of the Site building was finished with a mixture of metal siding, brick, and masonry block. The majority of the perimeter of the Site building was paved with asphalt that was used for parking as well as access to the loading bays. A small area on the northern side of the Site building, near the front entrance, was observed to be grass covered. A gravel parking lot was observed in the southwest portion of the Site, along with what appears to be a small drainage slough in the southwest portion of the Site.

The surrounding land consisted of a mixture of commercial and manufacturing uses, as described below.

North: Seel Avenue followed by commercial and manufacturing properties including; WD Industrial Group, Precision Grinding, Safety Base, and National Leasing, with Wilson Place beyond.

South: Commercial and manufacturing properties including a Manitoba Hydro office and Crystal Bay Restaurant followed by Buffalo Place with McGillivray Boulevard beyond.

East: Otter Street followed by commercial and manufacturing properties including The Prichard Group and Metal-Pac.

West: Commercial properties including a chiropractors office, Linden Ridge Animal Hospital, and Molson Canada followed by Waverly Street with a residential neighbourhood beyond.

2.2 PROPOSED DEVELOPMENT USE

CWS proposes to renovate the existing facility to an agrichemical crop protection storage facility. CWS will apply for certification from the AWSA following the completion of renovations and operate the facility under AWSA standards and protocols. Renovations are scheduled to include:

- Interior water containment curbing in the Warehouse area
- Upgrading building ventilation
- Upgrading overall Site building electrical system
- Installation of perimeter fencing
- Site water containment system
- Installation of a Site building alarm system

CWS has already established and documented Standard Operating Procedures (SOPs), a Fire Safety Plan, a Draft Emergency Response Plan (ERP) based on corporate protocols and customized for the Seel Avenue facility and location.

Based on a review of in-house facility documents, the proposed facility will operate as warehousing for agrichemical products. The warehousing activities will include the receiving, handling, storage, repackaging, loading and unloading, and transportation of products. Repackaging may involve filling mini-bulk shuttles and reconditioning returnable shuttles. Dry bulk products may also be repackaged into intermediate bulk containers. All chemical product handling and storage will be confined to the warehouse portion of the Site building in which the proposed secondary containment (curbing) will be installed. Fire suppression facilities will also be installed in the chemical storage area. The remainder of activities at the Site will include administration and maintenance of the facility.

Traffic at the facility is expected to include approximately eight (8) less than truckload (LTL) third party carriers on a daily basis and six (6) to 10 full truckload (FTL) third party carriers on a weekly basis. In addition, CWS will operate eight (8) full time trucks that would account for an aggregate total of 60 to 80 round trips per day.

Security will include the perimeter fencing with vehicle gates off Seel Avenue and Otter Street. Gates will be open during normal business hours (7:00 am – 5:00 pm) and locked at all other times. All fence and building accesses will be locked with coded key pads. Assigned emergency coordinators will have keys for all locks. The fire sprinkler alarm will be monitored 24 hours by ProTelec Alarms.

CWS is undertaking the development and operation of the Site as a private transaction without any government funding. Public consultation has not been undertaken with the Site redevelopment.

2.3 PERMITS/AUTHORIZATIONS/APPROVALS

AMEC requested a Manitoba Conservation (MC) file search as part of the Phase I ESA to determine if MC had any records pertaining to the Site. Based on MC's response letter dated 11 June 2012, the department has no record of any outstanding work orders, complaints, violations, licenses , or permits relating to this property with respect to the Environment Act, Public Health Act, Dangerous Goods Handling and Transportation Act, Ozone Depleting Substances Act, the Waste Reduction and Prevention Act and the Contaminated Sites Remediation Act. The letter also states that the Site is not identified as an impacted/contaminated site under the Contaminated Sites Remediation Act. According to the most recent records, the Site at 1664 Seel Avenue in Winnipeg, Manitoba (registered under Sonoco Flexible Packaging) is a registered hazardous waste generator of Petroleum Distillates, Flammable Liquids, Polychlorinated Biphenyls, and EHS Sol (Mercury). Ms. Sonja Bridges, Environment Officer for Manitoba Conservation, was contacted for more details about these listing.

According to Ms. Bridges, the Site was approved to produce 2460 litres of petroleum distillates per month and 10 litres of flammable liquids per month. In addition, in July 2004, Sonoco applied for permission to dispose of a one-time 100 kg of PCB waste and a one-time 5kg of mercury as a waste. Further, in April 2008, Sonoco applied for permission to dispose of a one-time 900 kg of PCB waste.

In the event of a fire, firewater will be retained in the secondary containment area and tested to assess potential disposal options. CWS will discuss and obtain Manitoba Conservation approval for the proposed disposal option prior to implementation.

Based on information provided by CWS, non-hazardous wastes, including domestic garbage and recyclables, will be separated and disposed in commercial dumpsters and picked-up by a licensed commercial hauler. There will be no generation of hazardous waste.

3.0 DESCRIPTION OF EXISTING ENVIRONMENT

3.1 BIOPHYSICAL ENVIRONMENT

3.1.1 Geology/Hydrogeology

Based on geological maps, the subsurface stratigraphy in this area of Winnipeg normally consists of topsoil and fill materials underlain by glacio-lacustrine silt and clay to a depth of about 9 to 12 meters (m) from grade. A deposit of silty till, typically a few meters or more in thickness, occurs between the clay and the underlying bedrock. Bedrock in this area is from the Upper Fort Garry

Member and consists of cherty limestone of variable thickness (Baracos et al., 1983). Bedrock is estimated to occur at about 12 to 15 m below grade.

Visual assessment of collected soil samples during AMEC's Phase II ESA indicated that the stratigraphy of the Site included granular fill material over medium to high plastic clay which extended to the termination depth of the test holes (6.1 m).

Fractured zones in the bedrock comprise the major aquifer in the area. There are no aquifers above the bedrock. Given the substantial clay thickness, the potential for contamination of the aquifer, from on or off-site sources, is considered to be low.

A total of 30 wells are registered in the Manitoba Water Stewardship water well database program (GWDRILL, 2010) that are within 1 km of the Site. Of the 30 wells; 22 are registered as industrial or air conditioning use, 7 are listed as test or observation wells and one (1) well is listed as an irrigation well. All wells are completed and cased into the carbonate bedrock aquifer at a minimum casing depth of 16.8 m. Copies of the well registries are included in Appendix C.

3.1.2 Topography and Surficial Drainage

The Site is located in the physiographic division of the Manitoba Lowland within the Red River Plain district.

The Manitoba Lowland is characterized by relatively flat to gently undulating relief. In the area of the City of Winnipeg, ground surface elevation does not vary more than a few metres with exception of the Red River and Assiniboine River banks and man-made structures (eg Red River Floodway). The area of the Site is extremely flat with less than 1 m of elevation difference for hundreds of metres in extent.

Surface drainage in the vicinity of the Site consists of gently sloped landscaping towards storm water catch basins at and surrounding the Site. The catch basins are attached to the City of Winnipeg Storm Water Sewer system, which discharge into the Red River, approximately 2 km northeast of the Site. A shallow drainage ditch is also present along the southeast side of Seel Avenue. The ditch continues past the Site to the northeast, but does not appear to drain into any course. Water in the ditch would remain until evaporated or percolation into the subsurface.

3.1.3 Climatic Conditions

Winnipeg climate is characterized by a strong seasonal pattern of both temperature and precipitation. The normal location of the Mid-Latitude Winter-Dry climate is in the interior of the continents in the mid-latitudes. This continental location causes a large annual temperature range because of continentality.

This climate receives Maritime Tropical air masses in the summer with occasional Continental Tropical air masses. Summers are hot and humid with intense summer convectional storms. Continental Polar air masses are dominant in the winter with an occasional outbreak of Maritime Polar air. Continental Polar air masses are associated with cold, dry weather conditions.

Precipitation mainly occurs in the summer from thunderstorm activity. The mid-latitude cyclone produces a smaller quantity of precipitation in the winter (Physicalgeography.net).

There are 40 weather stations located in the City of Winnipeg. According to Environment Canada's Website, the mean annual temperature within the Winnipeg area is 2.5^{O}C with a maximum average temperature of 26.0^{O}C and a minimum average temperature of -22.3^{O}C. The mean annual precipitation is reported as 522 mm.

3.1.4 Surface Water Bodies

The only persistent surface water feature within 2 km of the Site is the Red River, which is located east / northeast of the Site. The Red River flows from the confluence of the Bois de Sioux and Otter Tail rivers in North Dakota and Minnesota into and across the southeastern portion of Manitoba and drains into Lake Winnipeg, north of the City of Winnipeg.

3.1.5 Vegetation

During the Site visit completed as part of the Phase I ESA, the ground surface at the Site was predominantly asphalt with manicured grassed areas and a gravelled parking area. Bullrushes, sedges and reeds were observed in the ditch adjacent to Seel Avenue. The surrounding areas to the Site contained similar vegetation and ground cover.

Manitoba Conservation maintains a list of threatened and endangered species. The following list of plants from the threatened species list, including Latin names, are located in Manitoba:

- Buffalograss — Buchloë dactyloides
- Culver's-root — Veronicastrum-virginicum
- Hackberry — Celtis occidentalis
- Hairy Prairie-Clover — Dalae villosa
- Riddell's Goldenrod — Solidago riddelli
- Western Silvery Aster — Symphyotrichum
- Western Spiderwort — Tradescantia occidentalis

The following list of plants from the endangered species list, including Latin names, are located in Manitoba:

- Great Plains Ladies'-Tresses — Spiranthes magnicamporum
- Small White Lady's-slipper — Cypripedium candidum
- Western Prairie Fringed-orchid — Platanthera preaclara

There are no known threatened or endangered plant species in the Site area nor the potential for growth of these species due to the industrial use of the Site, ground paving, and maintained vegetation areas.

3.1.6 Wildlife

Mammals and birds normally observed within industrial areas of Winnipeg include rodents, crows, and robins. Amphibians and reptiles may be present in neighbouring ditches and low lying areas.

There are no wildlife management areas within 2 km of the Site and no documented ecologically significant areas.

The following list of mammals and birds from the species at risk, including Latin names, is located in Manitoba:

Endangered

• Baird's Sparrow	Ammodramus bairdii
• Burrowing Owl	Athene cunicularia
• Eskimo Curlew	Numenius borealis
• Loggerhead Snake	Lanius ludovicianus
• Peregrine Falcon	Falco peregrinus
• Piping Plover	Charadrius melodus
• Ross's Gull	Rhodostethia rosea
• Uncas Skipper	Hesperia uncas
• Whooping Crane	Grus Americana

Threatened

• Boreal Woodland Caribou	Rangifer tarandus caribou
• Dakota Skipper	Hesperia dacotae
• Ferruginous Hawk	Buteo regalis
• Great Plains Toad	Bufo cognatus
• Mule Deer	Odocoileus hemionus
• Ottoe Skipper	Hesperia ottoe
• Polar Bear	Ursus maritimus
• Sprague's Pipit	Anthus spragueii

Extirpated

• Greater Prairie-Chicken	Tympanuchus cupido
• Grizzly or Brown Bear	Ursus arctos
• Kit or Swift Fox	Vulpes velox
• Long-Billed Curfew	Numenius americanus
• Muskox	Ovibos moschatus
• Pronghorn	Antilocapra Americana
• Riding's Satyr	Neominois ridingsii
• Trumpeter Swan	Cygnus buccinators

Fish species that could be found in the Red River include walleye, yellow perch, northern pike, mooneye, burbot, brown bullhead, rock bass, white sucker, shorthead redhorse and common carp.

There are no known populations of threatened or endangered mammals or bird species within the Site area nor the potential for the residency of these species based on the land usage, future perimeter fencing and lack of ecological factors (suitable habitat and food supply).

3.2 SOCIOECONOMIC ENVIRONMENT

As the Site is located within a heavy industrial park and will be enclosed by a chain link fence, the socioeconomic environment is considered limited. During the Phase I ESA Site visit, no existing

public safety and health risks were identified. The area is not located within or close to a national park.

According to the Manitoba Government's provincial and Winnipeg Municipal heritage sites, the closest designated heritage site is the Earl Grey School at 340 Cockburn Street North, approximately 3.7 km from the Site.

The nearest First nation community to the City of Winnipeg is the Swan Lake First Nation Reserve Land 8a, located in Rural municipality of Headingly, Manitoba. It should be noted that at the time of this application, the former Canadian Forces Base Kapyong Barracks, located at Kenaston Boulevard, is under negotiation with Treaty 1 First nations to be potentially redeveloped into an urban reserve. However, the Kapyong Barracks are located approximately 2.6 km from the Site.

4.0 DESCRIPTION OF POTENTIAL ENVIRONMENTAL EFFECTS

Potential Site operation effects on the environment are assessed in the following sections. Mitigation measures for potential effects are discussed in the following section.

4.1 AIR EMISSIONS

Air emissions expected from the development would include emissions from the facility heating and cooling system. Fugitive emissions from storage and repackaging of agrichemicals would be considered negligible. There would be no other generation of air emissions from the operation.

4.2 NOISE EMISSIONS

Noise originates from the development include transport truck traffic consistent with an industrial facility.

Given the location of the facility in a heavy industrial zoned area of the City of Winnipeg and the distance to the nearest non-industrial property of approximately 100 m, noise issues are not anticipated.

4.3 INDUSTRIAL AND SANITARY WASTEWATER EFFLUENT

There will be no effluent produced at the facility. Water employed to combat a fire will be contained within the chemical storage secondary containment curbing and will be tested and assessed individually per event to determine disposal options.

The sanitary effluent from the facility is connected directly to the City of Winnipeg municipal wastewater system.

4.4 CHEMICAL STORAGE

The facility will be employed for the handling and storage of agrichemical products. Loss or release of the agrichemical products, in raw form or dissolved in water used to combat a fire and in sufficient volume, would produce adverse effects to the environment, mainly to ecological receptors.

Based on the documented SOPs, all chemicals used and stored at the Site will be effectively controlled. Storage will be in accordance with AWSA and National Fire Code (NFC) protocols. Storage will be regulated by AWSA and/or NFC codes in regards to:

- Storing products according to flashpoint;
- Creating Individual Storage Areas (ISAs) based on aisle way requirements;
- Minimizing product permitted in a single fire compartment;
- Monitoring storage heights for flammable and combustible liquids, other classified goods, and non-regulated products;
- Monitoring compatibility of products within warehouse;
- Recording total area of dangerous goods in building;
- Maintaining records of each ISA chemical volumes, properties, and required safety requirements; and

- Maintaining handling, ambient condition, housekeeping, and transportation (placards) procedures.

Additional information regarding storage procedures is included in the SOP which is included as Appendix D.

Further mitigation measures regarding chemical storage are detailed in Section 5.1.

4.5 HAZARDOUS/NON-HAZARDOUS WASTE

Based on the information provided by CWS, hazardous materials stored at the Site will be limited to propane canisters and small amounts of petroleum hydrocarbons.

Forklift propane canisters will be stored in a storage cage outside the facility near the northwest corner of the building. The storage capacity will be limited to 12 canisters at one time. The SOP (Appendix D) includes operating procedures for forklift use in the facility, including the safety procedures for handling and changing propane canisters.

Up to 10 gallons (45 L) of gasoline and up to 10 gallons (45 L) of diesel fuel will be stored at the Site in a CSA approved flammable storage chest. The petroleum fuels will be employed for the water pump at the Site.

With exception of used propane canisters, hazardous waste will not be generated at the Site. Non-hazardous wastes, including domestic garbage and recyclables, will be separated and disposed of in commercial dumpsters and picked-up by a licensed commercial hauler.

Based on the small volume of hazardous materials expected on Site at any given time, there is little perceived risk of environmental effects at the Site.

4.6 STORM WATER MANAGEMENT

A separate storm water sewer system is present at the Site to manage surface run-off. The storm water system discharges into the Red River, approximately 2 km northeast of the Site. A drainage ditch is also located on the southeast side of Seel Avenue. This ditch continues to the northeast, but does not have a course in which to drain and runoff water would be expected to evaporate or percolate into the ground surface.

The storm water system will be upgraded as part of the redevelopment of the Site. Currently, four catch basins are present on Site, located on the southwestern portion of the Site (3) and northeastern portion of the Site (1). Two additional catch basins are proposed in the current gravel parking area. Additionally, a storm sewer control valve will be installed on the storm water sewer system prior to the system exiting the Site.

Based on the facilities at the Site and proposed upgrades, there does not appear to be a concern for environmental effects with regards to storm water.

4.7 WILDLIFE AND VEGETATION

The current area of the Site is an Industrial Park and not an important habitat for many birds and animals, due to the lack of vegetation. There are no endangered or rare species of plant or wildlife present in the area. The Site will be surrounded by a chain-link fence which keeps out larger mammals from the Site. Based on the location, the Site operations will have little to no effect on plants and wildlife.

4.8 SOCIO-ECONOMIC EFFECTS

CWS will create economic benefits to the local area and City of Winnipeg in the form of employment and tax revenue. As the Site is located in the industrial park area, there is limited to no socio-economic implications to the area.

5.0 MITIGATION MEASURES

Based on the operation of the proposed facility and potential environmental impact, potential adverse environmental effects could result in the loss or release of product or release of water employed in suppressing a fire in the warehouse. Mitigation measures to prevent the release of product or firewater into the environment are detailed below:

- Warehouse curbing – the perimeter of the designated product storage area of the warehouse will be fitted with a primary containment curbing. The curbing will be 15.24 cm in height with 12.7 cm ramps to direct liquid to the loading dock area for secondary containment. The curbing will be of sufficient containment for retaining chemical spills or firewater retention as regulated by AWSA. The curbing and ramps orientation is shown in the ERP (Appendix E, Diagram ER-4).

- Surface water control – The existing storm water sewer system will be expanded to include an additional line with two catch basins in the gravel parking area southeast of the warehouse. In addition to the added line, a control valve will be installed prior to the point where the on-Site system leaves the Site and ties into the City storm water sewer. In the event of a product release outside of the warehouse during loading/unloading or vehicle mishaps in the parking area, the control valve will be employed to prevent the introduction of product to the City system and eventually the Red River.

- Fire suppression – The facility is currently supplied with a sprinkler tie-in system that is considered adequate for the operation of the agrichemical storage. The sprinkler system is supplemented by standpipe fire hoses and fire extinguishers. The sprinkler system is equipped with an alarm which is monitored on a 24 hour basis by Pro Tech alarms and is scheduled for regular servicing by Vipond Inc. CWS has prepared a Fire Safety Plan (Appendix F) to administer the handling and operations during a fire and includes plans of evacuation routes, fire and safety equipment locations, and inventory locations. The warehouse portion of the building is constructed of masonry block, concrete and steel frames, which would be considered mostly non-flammable.

- Site security – CWS has scheduled the installation of a full perimeter fence with controlled access and egress points. Building access will be through locked doorways with keypads. The security proposed would be considered adequate to prevent break-ins and vandalism of products.

- Administrative controls – CWS will be applying for AWSA certification for the facility. As previously stated, several safety and standard operating procedure documents have already been drafted, which will facilitate the response of foreseeable incidents potentially harmful to the environment.

6.0 FOLLOW-UP PLANS

Based on the type and operation of the facility, limited potential for environmental impact and the controls that are currently in place, further follow-up plans are not required at this time. Based on AMEC's review, the importance of environmental compliance is well defined and acknowledged by CWS personnel. Company and future site documentation appears to be generally well maintained and accessible and procedures are well established. It has been reported to AMEC that the Site will be secured with perimeter fencing and well maintained and properly managed. Chemical inventory is clearly identified, will be properly located and stored, and MSDS and emergency information will be easily accessible.

In future, a site closure plan would be developed to address all the necessary environmental requirements in the event of future plant decommissioning.

7.0 CONCLUSIONS

Detrimental environmental effects as a result of the proposed facility activities are expected to be minimal or insignificant and all potential environmental effects are expected to be further reduced through the implementation of the described mitigating measures. Table A is a summary of the environmental effects identified in the report.

TABLE A: SUMMARY OF POTENTIAL ENVIRONMENTAL EFFECTS

POTENTIAL IMPACTS			MITIGATION MEASURES
	Not a Concern	Currently Being Mitigated	
Air Quality	X		There will be no sources of air emissions from the facility, apart from standard heating and cooling equipment. It was reported to AMEC that the previous tenant (Sonoco) had an air permit relating to VOC emissions arising from flexographic printing, rotogravure printing and adhesive lamination. All equipment associated with Sonoco's printing and lamination operations has been removed from the Site and the permit will be allowed to expire.
Excessive Environmental Noise	X		Manufacturing will not be conducted at the facility. Traffic will be normal for an industrial warehousing property. The Site is located within the Fort Garry Industrial Park and the nearest non-industrial or non-commercial property is approximately 100 m from the Site.
Geology/Soils	X		Environmental assessments have identified that the soils at the Site consist of glaciolacustrine clay to a depth of approximately 9 to 12 meters (m) from grade. A deposit of silty till, typically a few meters or more in thickness, occurs between the clay and the underlying bedrock. Bedrock in this area is from the Upper Fort Garry Member and consists of cherty limestone of variable thickness and is estimated to occur at about 12 to 15 m below grade. Fractured zones in the bedrock comprise the major aquifer in the area. There are no aquifers above the bedrock. Given the substantial clay thickness, the potential for contamination of the aquifer, from on or off-site sources, is considered to be low.
Industrial Waste Effluent		X	There will be no effluent produced at the facility. Water employed to combat a fire will be contained within the chemical storage secondary containment (curbing) and will be tested and assessed individually per event to determine disposal options.
Sewage Disposal	X		The sanitary facilities from the Site are connected to the City of Winnipeg municipal wastewater system.
Chemical Storage		X	All chemicals used and stored at the Site will be effectively controlled. Storage areas will be fitted with secondary containment (curbing). Standard operating procedures and emergency response planning for chemical storage / releases have been developed.
Hazardous Materials		X	Forklift propane canisters will be stored in a storage cage outside the facility. The storage capacity will be limited to 12 canisters. Up to 10 gallons (45 L) of gasoline and up to 10 gallons (45 L) of diesel fuel for a water pump will be stored in a CSA approved flammable storage chest.
Storm water Management		X	A separate storm water sewer system is present at the Site and will be upgraded as part of the redevelopment. Currently, four catch basins are present on Site and two additional catch basins are proposed. Additionally, a storm sewer control valve will be installed on the storm water sewer system prior to the system exiting the Site.

Plants	X		The Site is located in an industrial setting with industrial properties surrounding it. There are no sensitive ecological receptors or land use within 300 m of the Site.
Animals	X		
Land-use	X		
Employment/ Income	X		It is expected that the operation of the chemical warehouse at the Site will provide employment opportunities, however the net employment in comparison to the previous tenant or operations at the Site will likely be similar

8.0 CLOSURE

No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of a standardized environmental protocol is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with the property, given reasonable limits of time and cost.

This report was prepared for the exclusive use of CWS Logistics Ltd. and is intended for the site located at 1664 Seel Avenue in Winnipeg, Manitoba. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the third party. Should additional parties require reliance on this report, written authorization from AMEC will be required. With respect to third parties, AMEC has no liability or responsibility for losses of any kind whatsoever, including direct or consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The report is based on data and information collected by AMEC. It is based solely on the conditions of the Site encountered at the time of the Site visit, supplemented by a review of information and data obtained by AMEC as described in this report and discussions with a representative of the owner/occupant, as reported herein. Except as otherwise maybe specified, AMEC disclaims any obligation to update this report for events taking place, or with respect to information that becomes available to AMEC after the time this report was issued.

In evaluating the property, AMEC has relied in good faith on information provided by other individuals noted in this report. AMEC has assumed that the information provided is factual and accurate. In addition, the findings in this report are based, to a large degree, upon information provided by the current owner/occupant. AMEC accepts no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted.

AMEC makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and change. Such interpretations and regulatory changes should be reviewed with legal counsel.

This Report is also subject to the further General Conditions in Appendix G.

We trust that the information presented in this report meets your current requirements. Should you have any questions, or concerns, please do not hesitate to contact the undersigned.

Respectfully submitted,

AMEC Environment & Infrastructure

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Group Leader - Manitoba

Reviewed by:

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MB/mb

Dist: (1) Client

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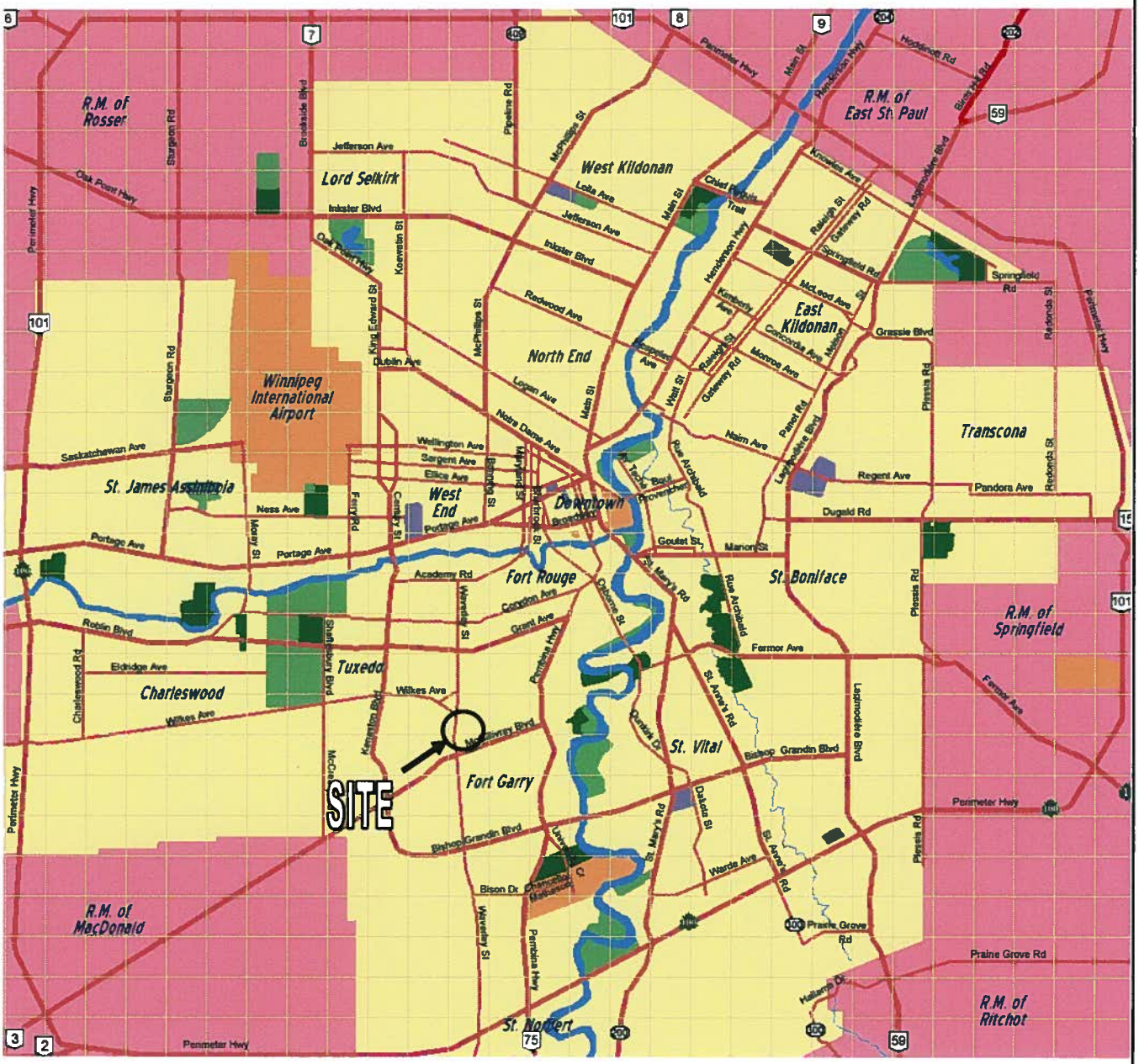
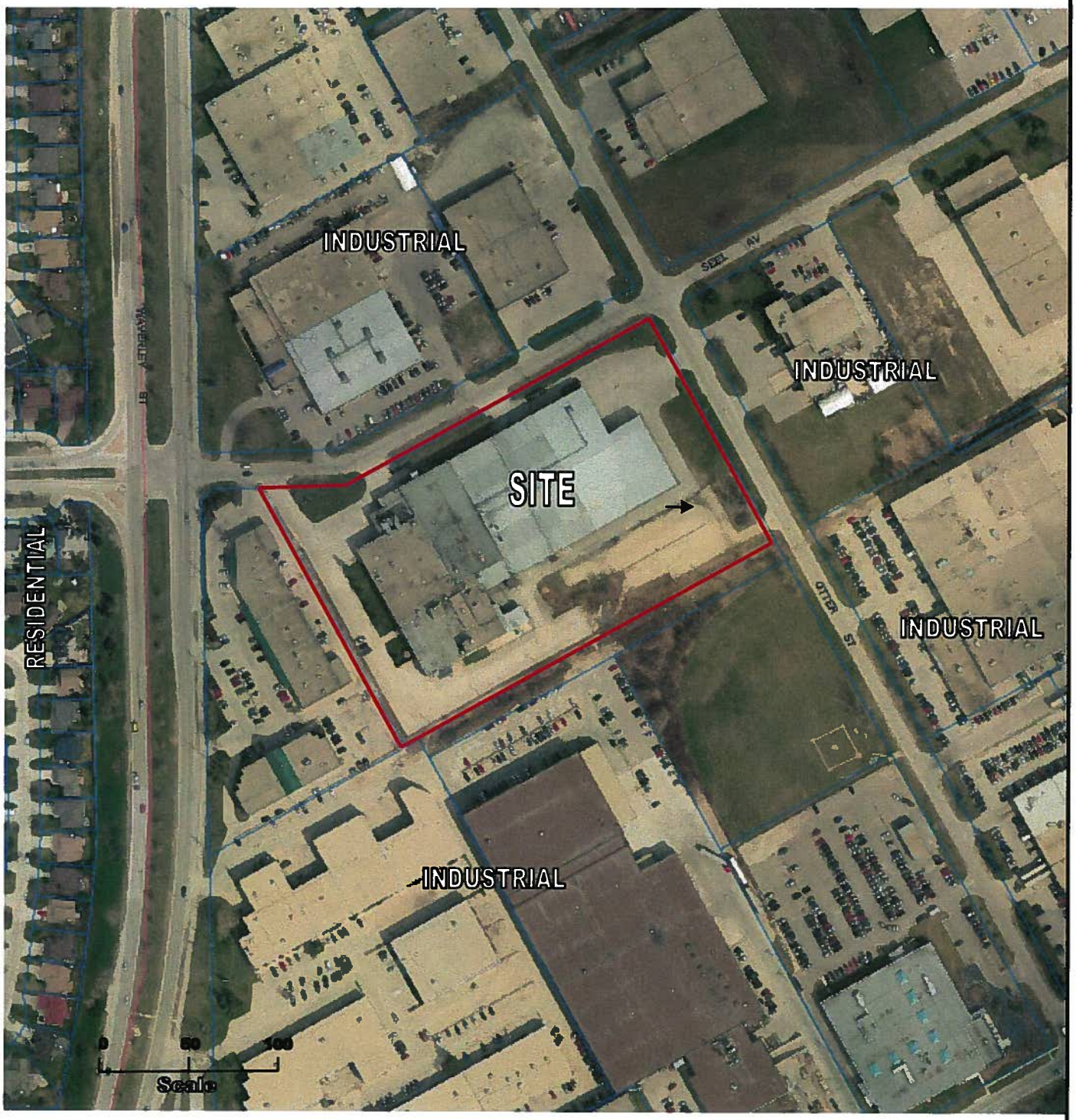
FIGURES



CITY OF WINNIPEG

amec **Environment & Infrastructure**		**SITE LOCATION PLAN** **ENVIRONMENT ACT PROPOSAL REPORT** **1664 SEEL AVENUE** **WINNIPEG, MANITOBA**		
CWS Logistics Ltd.				
Drawn: N/A	Scale: ~1:150 000	Date: Dec/12	Project No.: WX1691002	Figure: 1



Environment & Infrastructure **CWS LOGISTICS LTD.**		**SITE AND SURROUNDING LAND USE** **ENVIRONMENT ACT PROPOSAL REPORT** **1664 SEEL AVENUE** **WINNIPEG, MANITOBA**		
Drawn: N/A	Scale: As Shown	Date: Dec/12	Project No.: WX1691002	Figure: 2

APPENDIX A

GENERAL PRODUCT INVENTORY

CWS Logistics - Inventory Summary Report

Customer: 5050 - Yara Belle Plaine Inc

Winnipeg

Product Code	*Description*	*Unit*	*Quantity*
ECA2359	Agripotash/Folia-K (2 x 10L Case)	Litre	10680
ECA0020	Bortac 150 (2 x 10L Case)	Litre	220
ECA0020-D	Bortac 150 (2 x 10L Case)	Litre	60
ECA0066	Coptrac 1000 Ltr Tote	Litre	2000
ECA0065	Coptrac/Coptrel 500 (2 x 5L Case)	Litre	2910
ECA2258	CU Pholex 10.5% (2 x 10L Case)	Litre	7460
ECA0238	Mantrac (2 x 10L Case)	Litre	10
ECA2308	MN Pholex 7% (2 x 10L Case)	Litre	3040
ECA0375	Seniphos (2 x 10L Case)	Litre	1440
ECA0475	Zintrac 700 (2 x 10L Case)	Litre	6000
ECA0476	Zintrac 700 1000 Ltr Tote	Litre	4000
ECA2257	ZN Pholex 7.9% (2 x 10L Case)	Litre	8620

CWS Logistics - Inventory Summary Report

Customer: 2350 - E.I. duPont Canada Company ***Winnipeg***

Product Code	*Description*	*Unit*	*Quantity*
D14430798	Barricade Case	Case	179
D14902008	Barricade II	(486 g + 3.4 L)	1260
A01253057	CMB Refine SG Grower Bag	20 bags/Case	1
D13837288	Coragen	4 X 3.79 Ltr Case	0.5
D12343264	Express 50SG	8 x 486 gr Case	46
D14182354	Express Pro	8 x 587 Gm Case	205
A01411715	Grower Bag DB-10550 - 6 Product	10 bags/Case	44
A01406160	Grower Bag DB-1254 - 6 Product	10 bags/Case	20
A01411724	Grower Bag DB-8454-6 Product	10 bags/Case	21
A01411733	Grower Bag DB-858 - 6 Product	10 bags/Case	7
A01253011	Grower Bag Express SG	10 Bag Case	68
A01406598	Grower Bag NC-00439 - 6 Product	10 bags/Case	91
A01406026	Grower Bag NC-0050 - 6 Product	10 bags/Case	110
A01357338	Grower Bag PP-23235	10 bags/Case	44
A01413296	Grower Bag PP-23235 - 6 Product	10 bags/Case	63
A01413312	Grower Bag PP-2525 - 6 Product	10 bags/Case	16
A01413303	Grower Bag PP-31155 - 6 Product	10 bags/Case	47
A01261084	Grower Bag Refine SG - 2 Product	20 bags/Case	57
A01414669	Grower Bag Trition C - 6 Product	10 bags/Case	25
D14394264	Harmony Grass	28.37 Jug	360
D14428141	Harmony Max Case	Case	86
D10273740	Muster 75DF	Case	18.75
D14558222	Pinnacle 50SG	Case	2.7
D14388246	Ppac Express Pro Precision Pac (2 Product)	16 Kg	5
D13871221	Ppac Refine SG Precision Pac	16 Kg	18
D14395950	Ppac Tribenuron Precision Pac (2 Product)	16 Kg	8
D10273501	Prism	10 x 480 GM Bag	0.9
D12343028	Refine Extra 50 SG	8 x 486 GM Case	15.255
D14598459	Refine M Solumax	2 (4x121.5G + 7.6L) Case	416
D14617912	Triton K	Case	1248
D10892124	Ultim 75 DF	134.8 GM Bag	15
D14662718	Vertisan	Case	73.5

CWS Logistics - Inventory Summary Report

Customer: 2050 - Tigur-Sul Products (Canada) Co. ***Winnipeg***

Product Code	*Description*	*Unit*	*Quantity*
100151	Accuseed Nutrient Grade Sulphur	25 Kg Bag	294
100165	Tiger 90 CR Sulphur	25 Kg Bag	280
100011	Tiger 90 CR Sulphur Mini Bulk	1000 KG Mini Bulk Bag	20
100053	Tiger Micronutrient Copper 12%	25 Kg Bag	73

CWS Logistics - Inventory Summary Report

Customer: 1943 - Bayer Cropscience - Seed

Winnipeg

Product Code	Description	Unit	Quantity
79683839	Invigor 1145 W/Prosper	22.7 Kg Bag	97
79730993-R	Invigor 1145 W/Prosper & Jumpstart *Rework*	22.7 Kg Bag	17
79683839-R	Invigor 1145 W/Prosper *Rework*	22.7 Kg Bag	73
79683839-W	Invigor 1145 W/Prosper *Waste*	22.7 Kg Bag	6
3656180	InVigor 5030 W/Prosper	22.7 KG Bag	72
3656180-R	InVigor 5030 W/Prosper *Rework*	22.7 KG Bag	316
3656180-W	InVigor 5030 W/Prosper *Waste*	22.7 KG Bag	1
79257392	Invigor 5440 W/Prosper	454 kg Bag	8
79090641	Invigor 5440 W/Prosper	22.7 kg Bag	800
79516940-R	Invigor 5440 W/Prosper & Jumpstart *Rework*	22.7 Kg Bag	4
79090641-R	Invigor 5440 w/Prosper *Rework*	22.7 kg Bag	1005
79090641-W	Invigor 5440 W/Prosper *Waste*	22.7 kg Bag	17
79656114	InVigor 5770 W/Prosper	22.7 kg Bag	267
79656114-R	Invigor 5770 w/Prosper *Rework*	22.7 kg Bag	452
79656114-W	InVigor 5770 W/Prosper *Waste*	22.7 kg Bag	6
79120400	Invigor 8440 W/Prosper	22.7 kg Bag	47
79120400-R	InVigor 8440 W/Prosper *Rework*	22.7 kg Bag	75
80206712	InVigor L120 W/Prosper	22.7 KG Bag	598
80509642	Invigor L120 W/Prosper & Jumpstart	22.7 Kg Bag	27
80509642-R	Invigor L120 W/Prosper & Jumpstart *Rework*	22.7 Kg Bag	57
80509642-W	Invigor L120 W/Prosper & Jumpstart *Waste*	22.7 Kg Bag	1
80206712-R	InVigor L120 W/Prosper *Rework*	22.7 KG Bag	120
80206712-W	InVigor L120 W/Prosper *Waste*	22.7 KG Bag	9
80015461	InVigor L130 w/Prosper	22.7 KG Bag	2003
79991533	inVigor L130 W/Prosper	454 Kg Bag	4
80015461-W	InVigor L130 w/Prosper *Waste*	22.7 KG Bag	35
80015461-R	InVigor L130 w/Prosper *Rework*	22.7 KG Bag	975
80035349	inVigor L150 W/Prosper	454 Kg Bag	7
79968418	InVigor L150 W/Prosper	22.7 KG Bag	2723
79989547-R	Invigor L150 W/Prosper & Jumpstart *Rework*	22.7 Kg Bag	29
79968418-R	InVigor L150 W/Prosper *Rework*	22.7 KG Bag	1847
79968418-W	InVigor L150 W/Prosper *Waste*	22.7 KG Bag	75
80261764	InVigor L154C W/Prosper	22.7 Kg Bag	694
80261764-R	InVigor L154C W/Prosper *Rework*	22.7 Kg Bag	292
80261764-W	InVigor L154C W/Prosper *Waste*	22.7 Kg Bag	2
80260091	Invigor L159 W/Prosper	22.7 kg Bag	80
80260091-R	Invigor L159 W/Prosper *Rework*	22.7 kg Bag	39
80260091-W	Invigor L159 W/Prosper *Waste*	22.7 kg Bag	3

CWS Logistics - Inventory Summary Report

Customer: 1941 - Bayer Cropscience (Packaging) ***Winnipeg***

Product Code	*Description*	*Unit*	*Quantity*
3705025	Empty Buctril M Drums (Pods)	128 Ltr	18
79369271	Empty Buctril M Raz Totes	450 Ltr Tote	14
79467893	Empty Infinity - Raz Tote	450 Ltr	6
79452489	Empty Infinity Drum	107 Ltr	16
4522213	Empty Liberty Drums (Pods)	108 Ltr	6727
4522213-07	Empty Liberty Drums *Dirty* 2007 & Older	108 Ltr	3
79553579	Empty Liberty Raz Tote	450 Ltr	896
80580509	Empty Prosaro	104 Ltr Shuttle	215
79907443	Empty Puma Advance	450 Ltr Tote	8
79924666	Empty Puma Advance	130 Ltr Shuttle	1
79473400	Empty Puma Raz Tote	450 Ltr Tote	2
4518720	Empty Puma Super Pod Fluorinated	99.3 Ltr	6
79295154	Empty Puma Super Schutz	640 Ltr	2
6052087	Empty Raxil T	200 Ltr	17
79218281	Empty Stratego Shuttle	130 Ltr shuttle	1
3705041	Empty Thumper Drum	128 Ltr	10
79474806	Empty Thumper Raz Tote	450 Ltr Tote	4
79210256	Empty Thumper Schutz Totes	640 Ltr Tote	1
79871295	Empty Tundra Granite	130 Ltr Shuttle	27
79276907	MT Liberty Schutz Tote - 864 Fill	1000 Ltr	23
4471848	MT Pallets 46 x 46	Pallet	88
4467948	MT Pallets 48" X 46"	Pallet	379
4469568	Seed Caps	Caps	190

CWS Logistics - Inventory Summary Report

Customer: 1940 - Bayer Cropscience ***Winnipeg***

Product Code	*Description*	*Unit*	*Quantity*
79380097	Ammonium Sulphate Solution *Bayer*	2 x 10 Ltr Case	19
4185950	Buctril M	2 X 8 Ltr Case	108.5
4185950-D	Buctril M *Damaged*	2 X 8 Ltr Case	0.5
3673212	Centurion	Case	28
79505558	Decis EC 50	4 X 2.4 Ltr Case	13
4205463-D	Ethrel *Damaged*	2 X 10 Ltr Case	1
79278977	Folicur EW 250	2 X 8.1 Ltr Case	4
79035136	Infinity EC	2 x 6.7 Ltr Case	61
4186728	Liberty 150	2 X 13.5 Ltr Case	311.5
4196677	Liberty Drum 150	108 Ltr Drum	3
5964074	Proline SC 480	2 x 5.1 Ltr case	6
79693745	Prosaro 250 EC	2 x 6.5 Ltr Case	8
79445385	Puma Advance	2 x 8.25 Ltr Case	41.5
79042639	Raxil MD	2 x 10 Ltr Case	23
80256906	Raxil WW	Case	8
3944801	Stratego	2 X 8.1 Ltr Case	53.5
79097506	Trilex AL F524	2 x 10 Ltr Case	7
80211082	Varro	Case	13
79709544	Velocity All in 1	2 X 8.1 Ltr Case	10.5

CWS Logistics - Inventory Summary Report

Customer: 1760 - AgResource

Winnipeg

Product Code	Description	Unit	Quantity
C24DA60010	2,4-D Amine 600	10 Ltr Jug	42
C24DE70010	2,4-D Ester 700	10 Ltr Jug	168
C24DE700115	2,4-D Ester 700	115 Ltr Shuttle	5
SCAN7355A227-D	73-55 Canola Acceleron *Damaged*	22.7 KG Bag	2
CACA96	Acapela	9.6 Ltr Jug	14
CADM3785	Admire	3.785 Ltr Jug	32
CAGR10	Agral 90	10 Ltr Jug	1
FAGRPLU30	Agrotain Plus	30 lb Bag	30
FAGRU946	Agrotain Ultra	9.46 Ltr Jug	206
CAGS10	Ag-Surf	10 Ltr Jug	24
CALL378	All Clear	3.78 Ltr Jug	34
CALL500F10	Allegro 500 F	10 Ltr Jug	69
CAMMUM10	Ammonium Sulphate *BAYER*	10 Ltr Jug	111
CAMM10	Ammonium Sulphate *WYNARD TECH*	10 Ltr Jug	58
CAPP10	Approve	10 Ltr Jug	18
CAPRMRFC567	Apron Maxx RFC	56.7 Ltr Tote	2
CARE98	Ares	9.8 L + 8.1 Ltr Jug	43
CASS340	Assail 70WP	340 GM Pouch	24
CASSE199	Assert FL	Case	10
CASSE108	Assert SC W/PH Adjuster	10.8 Ltr Jug	42
CASSII16	Assure II w/Suremix	8 Ltr / 8 Ltr Box	47
CATTXC186	Attain XC	Case	96
CATTXC4464	Attain XC Bulk Pak	Pallet	2
CAUT379	Authority 480	3.79 Ltr Jug	40
CAVE200C10	Avenge	10 Ltr Jug	22
CAVE113	Avenge 200C	113 Ltr Shuttle	6
CAXI21	Axial	9.7 Ltr + 11.3 Ltr Box - 21 Ltr	1245
CAXIX10	Axial Xtreme	10 Ltr Jug	1186
CBANII10	Banvel II	10 Ltr Jug	68
CBAR486	Barricade	Case	23
CBAT14	Battalioin	14 KG Box	105
SINBIOBL104	Bioboost Liquid	10.4 Ltr Jug	8
SINBIOBL104-D	Bioboost Liquid *Damaged*	10.4 Ltr Jug	1
CBRO2183	Broadband	Case	29
CBRO2183-Q	Broadband *Quarantine*	Case	2
CBRO17464	Broadband Bulk Pak	84.2Ltr Broadband + 90.4Ltr Adigor	2
CBUC8	Buctril M	8 Ltr Jug	18
CCAL5	Calmix	5 KG Box	8

Product Code	Description	Unit	Quantity
CCAS4G227	Casoron 4G	22.7 KG Bag	30
CCAS4G15	Casoron 4G	15 KG Bag	5
SINCELLTPL18-Q	Cell-Tech Pea/Lentil Innoculant *Quarantine*	18 KG Bag	11
SINCELLTWSOY18-D	Cell-Tech Soybean *West* *Damaged*	18 KG Bag	3
[illegible]NCELLTWSOY18	Cell-Tech Soybean Innoculant *West*	18 KG Bag	1221
[illegible]CHA1334	Charter	133.4 Ltr Drum	1
CCHARTU93	Charter RTU	9.3 Ltr	22
CCHO10	Choice	10 Ltr Jug	62
CCON526	Concet OD	5.26 Ltr Jug	40
CCRE4510	Credit 45	10 Ltr Jug	4
CCRU5FS5678	Cruiser 5FS	56.78 Ltr Tote	10
CCRU5FS234	Cruiser 5FS	23.4 Ltr	10
CCRUM115	Cruiser Maxx Cereals	115 Ltr	1
CCRUM115Dep	Cruiser Maxx Cereals *Deposit*	115 Ltr *Deposit*	1
CCURM8	Curtail M	8 Ltr Jug	84
CCUR18	Curzate 60DF	1.8 KG Bag	93
CDEV181	Devrinol 50DF	1.81 Kg Bag	41
CDIA10	Diazinon EC 500	10 Ltr Jug	36
CDIS23	Distinct	2.3 kg Jug	20
CDITDGR20	Dithane DG w/rainshield	20 KG Bag	8
CDIV10	Dividend XL RTA	10 Ltr Jug	34
CDUAII12	Dual II Magnum	12 Ltr Jug	24
CDYV10	Dyvel	10 Ltr Jug	101
CDYV10-D	Dyvel *Damaged*	10 Ltr Jug	1
CDYVDSP10	Dyvel DSP	10 Ltr Jug	2
CELI5	Eliminate	5 Ltr Jug	2
CEMBU10	Embutox 625	10 Ltr Jug	18
CNUFENH10	Enhance	10 Ltr Jug	186
[illegible]QU1134	Equinox	Case	43
[illegible]STP106	Estaprop Plus	10.6 Ltr Jug	78
CEVE21937	Everest 2.0	1.937 Ltr Jug	1459
CEVEGBX1937	Everest 2.0 GBX	1.937 Ltr + 2 X 5 Ltr	168
CEXPP567	Express Pro	567 Gr	5
CEXP486	Express SG	486GM	104
CFIG946	Fighter F	946 ML Jug	21
CFIN10	Finish	10 Ltr Jug	20
CFOLEW81	Folicur EW 250	8.1 Ltr Jug	10
CFRO24D40	Frontline 2,4-D	Case	10
CFRO24XC40	Frontline 2,4-D XC	Case	20
CFROXL10	Frontline XL	10 Ltr	532
CFROXL120	Frontline XL Shuttle	120 Ltr Shuttle	14
CGAV136	Gavel 75DF	13.6 KG Bag	35
CGAV136-D	Gavel 75DF *Damaged*	13.6 KG Bag	5

Product Code	Description	Unit	Quantity
CGEM200	Gemini	200 Ltr Drum	1
CGEM6	Gemini	6 Ltr	22
CGEM200DEP	Gemini *Deposit*	200 Ltr Drum	1
CGEN20	General Storage Disinfectant	20 Ltr Pail	107
CGEN20-D	General Storage Disinfectant *Damaged*	20 Ltr Pail	6
CGENL378	Genesis	3.78 Ltr Jug	6
CGRA5	Gramoxone	5 Ltr Jug	24
CHARM709	Harmony Max	Case	18
CHARSG1287576	Harmony SG 128	Case	111
CHEA844	Heat	844 Gr Jug	1084
CHEA844-Q	Heat *Quarantine*	844 Gr Jug	6
CHORING757	Horizon NG	7.57 Ltr Jug	228
CINF335	Infinity	335 Ltr Tote	1
CINF335DEP	Infinity *Deposit*	335 LTr Tote Deposit	1
CINF67	Infinity EC	6.7 Ltr Jug	44
CINS112	Inspire	1.12 Ltr Jug	4
CKOC210	Kocide 200	10 KG Bag	117
CKOC210-D	Kocide 200 *Damaged*	10 KG Bag	2
CLAN283	Lance WDG	2.83 KG	100
CLIB135	Liberty	13.5 Ltr Jug	48
CLIB108	Liberty	108 Ltr Drum	26
CLIB135-D	Liberty *Damaged*	13.5 Ltr Jug	1
CLIB20010	Liberty 200 SN	10 Ltr Jug	24
CLIB108DEP	Liberty Deposit	108 Ltr Drum Deposit	26
CACHLD8	Liquid Achieve *NEW*	8 Ltr jug	20
CLOR10	Lorox L *Novasource*	10 Ltr	18
CLOR4ELF10	Lorsban 4E	10 Ltr Jug	2
CMAL85EC10	Malathion 85 EC	10 Ltr Jug	49
CMANP20	Manzate Pro Stick	20 kg Bag	35
CMANP20-D	Manzate Pro Stick *Damaged*	20 kg Bag	2
CMAVIII450	Maverick III	450 Ltr Tote	12
CMAVIII10	Maverick III	10 Ltr Jug	2280
CMAVIII450DEP	Maverick III *Deposit*	450 Ltr Deposit	12
CMCPA610	MCPA Amine 600	10 Ltr Jug	25
CMCPE610	MCPA Ester 600	10 Ltr Jug	110
CMCPS10	MCPA Sodium Salt 300	10 Ltr Jug	28
CMER81	Merge	8.1 Ltr Jug	1760
CMER1296	Merge	129.6 Ltr	1
CMER81-D	Merge *Damaged*	8.1 Ltr Jug	1
CMER1296DEP	Merge Deposit	129.6 Ltr Deposit	1
CMEX450M10	Mextrol 450M	10 Ltr Jug	98
CMEX450M10-Q	Mextrol 450M *Quarantine*	10 Ltr Jug	1

Product Code	Description	Unit	Quantity
CNEXNG757	Next Step NG	7.57 Ltr	244
CNEXNG757-D	Next Step NG *Damaged*	7.57 Ltr	2
CNUG10	NuGlo	10 Ltr Jug	34
CODYDLX703	Odyssey DLX *New*	Case	17
CODYDLX703-D	Odyssey DLX *New* *Damaged*	Case	1
COPTL22563	Option	6.3 Ltr Jug	18
COPTL22563-D	Option *Damaged*	6.3 Ltr Jug	1
COPT22	Option Box	Case	11
CPOL833	Polymer Coating (Celgard)	8.33 Ltr Jug	1
CPOL16D20	Polyram 16D	20 KG Bag	77
CPOLY20	Polyram DF	20 KG Bag	32
CPOLY20-D	Polyram DF *Damaged*	20 KG Bag	2
CPOT20	Potato ST 16	20 KG Bag	43
CPOU1	Pounce	1 Ltr Jug	63
CPRE696	Prepare 70 DF	696 GM Pouch	276
CPRE16	Pre-Pare Precision Pac	1 Bag + 1 Case of Growers Bags	45
CPREXC498	Prepass XC Co-Pak	4 x 112.5 Ltr + 2x2x12 Ltr	3
CPREXC193	Prestige XC	Case	188
CPREXC4632	Prestige XC Co-Pak	Pallet	1
CPRISG480	Prism SG	480 GM Bag	30
CPRIWG283	Pristine WG	2.83 Ltr Jug	10
CPRO65	Prosaro 250 EC	6.5 Ltr Jug	28
CPRO184	Proseed	1.84 Ltr Jug	3
CPRO5	Protect It	5 KG Box	56
CPUL9825	Pulsar	9.825 Ltr Jug	20
CPUMA825	Puma Advance	8.25 Ltr Jug	2
CPUR33	Pursuit	3.3 Ltr Jug	24
CPUR33-D	Pursuit *Damaged*	3.3 Ltr Jug	1
CPUR33-Q	Pursuit *Quarantine*	3.3 Ltr Jug	1
CQUI10125-Q	Quilt *Quarantine*	10.125 Ltr Jug	1
CRAN379	Ranman 40SC	3.79 Ltr Jug	11
CRAXMD10	Raxil MD	10 Ltr Jug	24
CRAXWW121	Raxil WW	10 Ltr + 2.1 Ltr Case	2
CREA	Reason	2 Ltr Jug	103
CREFMS9586	Refine M Solumax	9.1 Ltr + 486 gm	2
CREF486	Refine SG	486 GM pouch	50
CREF10	Reflex	10 Ltr Jug	174
CREG24010	Reglone 240	10 Ltr Jug	260
CREG24010-Q	Reglone 240 *Quarantine*	10 Ltr Jug	1
CREG240115	Reglone 240 EC	115 Ltr Shuttle	18
CREV378	Revus	3.78 Ltr Jug	100
CREV378-Q	Revus *Quarantine*	3.78 Ltr Jug	1

Product Code	Description	Unit	Quantity
CRIVL9	Rival 500 EC	9 Ltr Jug	26
CROUTHC115	Round Up Transorb HC	115 Ltr Shuttle	90
CROUTHC450DEP	Round Up Transorb HC	450 Ltr Tote Deposit	24
CROUTHC115DEP	Round Up Transorb HC	115 Ltr Shuttle Deposit	90
CROUTHC450	Round Up Transorb HC	450 Ltr Tote	24
CROUW115	Round Up WeatherMax	115 Ltr Shuttle	160
CROUW10	Round Up WeatherMax	10 Ltr Jug	2479
CROUW115DEP	Round Up WeatherMax	115 Ltr Shuttle Deposit	160
CROV84-D	Rovral Flo *Damaged*	8.4 Ltr Jug	1
CROVRX84	Rovral RX	8.4 Ltr	18
CRUS115	Rustler	115 Ltr Shuttle	10
CRUS10	Rustler	10 Ltr Jug	196
CRUS115DEP	Rustler	Shuttle Deposit	10
CSEL12	Select	Case	50
CSIE21937	Sierra 2.0	1.937 Ltr Jug	80
CSIG1648	Signal *OLD*	Case	1
CSIM95	Simplicity	8 Ltr + 1.5 Ltr Jug	206
CSPE128	Spectrum	Case	102
CSPI160	SpikeUp	Case	33
CSUP378	Super Spreader Sticker	3.78 Ltr Jug	16
CSUP378-D	Super Spreader Sticker *Damaged*	3.78 Ltr Jug	2
CSWI7938	Switch	793 GR	10
CSYL4	Sylgard 304	4 Ltr Jug	11
SINTATEASOY165	Tag Team Soybean Granular	16.5 Kg Bag	144
CTAK160	Takkle	160 Ltr Drum	4
CTAN1434	Tandem	14.34 Ltr Box	154
CTAR10-D	Target *Damaged*	10 Ltr Jug	1
CTEN1628	Tensile	Case	59
CTHU8	Thumper	8 Ltr Jug	8
CTIL8	Tilt	8 Ltr	13
CTOUT450	Touchdown Total	450 Ltr Tote	27
CTOUT10	Touchdown Total	10 Ltr Jug	72
CTOUT450DEP	Touchdown Total Deposit	450 Ltr Tote	27
CTRA946	Traxion	946 Ltr	4
CTRAXO10	Traxos	10 Ltr Jug	126
CTREL945	Treflan EC (High Flash)	9.45 Ltr Jug	128
CTREL945-Q	Treflan EC (High Flash) *Quarantine*	9.45 Ltr Jug	1
CTRIAL10	Trilex AL	10 Ltr jug	6
CTRIL10	Trillion	10 Ltr Jug	66
CTRIC1566	Trition C	jug	20
CTRIK12043	Triton K	Case	82
CTURB8	Turbocharge D	8 Ltr jug	77
CULT1348	Ultim 75	134.8 GM Bag	4

Product Code	Description	Unit	Quantity
CUNI4-D	Unite *Damaged*	4 Ltr Jug	2
CVANPMII115	Vantage Plus Max II	115 Ltr Shuttle	5
CVANPMII10	Vantage Plux Max II	10 Ltr Jug	966
CVAR8	Varro	8 Ltr Jug	122
[illegible]EL2	Velpar 75 DF	2 KG Bag	128
CVER10	Vertisan	10 Ltr Jug	6
CVIT280B10	Vitaflo 280	10 Ltr Jug	2
CVIT28010	Vitaflo 280 (Nufarm)	10 Ltr Jug	2
CXAO10	XA Oil Concentrate	10 Ltr Jug	72
FZICRZN6MN10L	Zicron-F 6% ZN, 1% MW + PPA	10 Ltr Jug	9

CWS Logistics - Inventory Summary Report

Customer: 1352 - Syngenta (Packaging)

Winnipeg

Product Code	Description	Unit	Quantity
144773	Agnique Fott 903-G Bulk	KG	4786
206049	Agnique PG 8107	KG	11637.6
130997	Alkamuls AG-1043 Blend	KG	4490
202167	Antifoam MSA 200 kg Tote	KG	379
128429	AT Plus 300F SP	1 KG	2640
128499	Atlox 4914	KG	404
144702	Atplus AL 2783 Bulk	KG	32922
166798	Banvel II Herbicide	KG	3557
185132	Berol 911	KG	1405
3546960	Booklet Foothills NG	2 X 7.57 Ltr	4603
306597	Booklet Propel 8 Ltr	Each	2885
296410	Booklet Target 10L/160L	Each	2175
355354	Booklet Tilt	Each	8190
357016	Booklet Topas	Each	264
302094	Bottle PE Natural 8.1L FLR LVL5	8 Ltr Jug	52
349060	Bottle Plastic, Natural, FLR	Each	12
169798	Bottle Sleeved Agral 90	Each	145
169798-Q	Bottle Sleeved Agral 90 *Quarantine*	Each	105
332524	Bottle Sleeved Foothills A	Each	3621
354700	Bottle Sleeved Foothills NG	2 X 7.57 Ltr	678
355212	Bottle Sleeved Propel	8 Ltr Jug	449
355357	Bottle Sleeved Tilt 250EC 8 Ltr	Each	609
184969	Bottle Target Sleeved	Jug	134
178433	Bulk Target	KG	1412
182701	Canplus 300	KG	10968
124020	Cap - 28mm 400 Foil White	28 MM	85
181164	Cap - 63 MM Indn Deal White	63 MM	15200
262554	Cap - 63mm Plastic Yellow	Each	1800
336657	Carton Agral 90 2x10	10 Ltr Each	407
354698	Carton Foothills NG	2 x 7.57 Ltr	2265
355211	Carton Propel	2 X 8 Ltr	652
353579	Carton Target	2 X 10 Ltr	1186
355356	Carton Tilt 250EC 2x8 Ltr	Each	6112
357019	Carton Topas	Each	1165
222877	Carton Touchdown Total	2 X 2.25 Gallon	28
329432	Carton Touchdown Total	2 X 10 Ltr	9
11784	Clodinafop-Propargyl Tech	KG	1677
403547	Cloquintocet - Mexyl Tech	KG	526

Product Code	Description	Unit	Quantity
206050	Diglycolamine Bulk	KG	10567.8
903941	Drapex 6-8	KG	1860
300303	Drum Poly 30 Gal/115Ltr	115 Ltr	4
801001	Empty Payloader 1000L Schutz last cont. Canplus	1000L Tote	12
[illegible]1002	Empty Payloader 1000L Schutz last cont. Sunspray	1000L Tote	19
185131	Emulpon C0- 360	KG	1361.95
128491	Exxate 800	1 KG	696
354699	Label Foothills NG	121.1 Ltr	585
296412	Label Target 160 Ltr	Each	626
185960	Liner - Inner Corrugated Board 2x10L	Each	971
185128	M-Pyrol	KG	2298
184989	MT Payloader SS Banvel	1000 Ltr Tote	14
185066	MT Turbocharge Payloaders	1200 Ltr Tote	14
169404	NE Vent, For Greif 115 LT Drum	Each	39
250080	NE Vent, For Horizon NG	Each	24
184988	Payloader Dicamba 480	1000 Ltr	8
185906	Payloader Score (Retums) *Bonar*	1200 Ltr Tote	20
184943	Payloader Tilt *Empty*	1000 Ltr Tote	14
22552	Propiconazole (CH)	KG	3520
185130	Rhodacal 70/B	KG	1415
800007	RNSG S200/Score (7299)	Each	720
184975	Score 45-E Oil - Schutz Tote	Ltr	967
354697	Sleeve Foothills NG 7.57 Ltr	Each	20
296411	Sleeve Target 10 Ltr	Each	173
184965	Solvesso 200 (Aromatic 200 Solvent)	KG	2800
226240	Stepsol Roe W	1 KG	3662
184966	Sunspray 11N	KG	5471
29908	Turbo Charge BL - CA	1000 Ltr Tote	1
[illegible]908-Q	Turbocharge *Quarantine*	KG	776.4
[illegible]0081	Valve & Dip Tube Assembly 160 Ltr Drum	Each	92
275576	Valve and Diptube Assembly - HNG	Each	9

CWS Logistics - Inventory Summary Report

Customer: 1350 - Syngenta Canada Inc.

Winnipeg

Product Code	Description	Unit	Quantity
21523	Allegro	2 x 10Ltr Case	66
42808	Axial Bulk Packs	77.6 Ltr + 90.4 Ltr	4
47069	Axial Xtreme	2 x 10 Ltr Case	432
75083	Bravo 500	2x10Ltr Case	247
45264	Bravo Zinc	450 Ltr Tote	12
42261	Cruiser Maxx Potatoes	Case	111
75096	Daconil	2 x 10 Ltr Case	72
41600	Gramoxone	4 x 5 Ltr Case	75
36732	Helix Xtra	1000 Ltr Tote	17
20367	Helix Xtra Black Chime	105 ltr Drum	1
30864	Reglone 240 EC	115 Ltr Shuttle	64
36866	Revus	4 x 3.78Ltr Case	876
40369	Ridomil Gold/Bravo	Case	34
46061	Scholar	12 X 1 Ltr	1
44813	Traxos	2 X 10 Ltr Case	18

CWS Logistics - Inventory Summary Report

Customer: 1250 - Cheminova Canada Inc. ***Winnipeg***

Product Code	*Description*	*Unit*	*Quantity*
10015450	Bullwhip	Case	1034
10015325	Cheminova Glyphosate	2 x 10 Ltr Case	48
10014734	Cheminova Glyphosate	450 Ltr Tote	5
10015449	Cougar 120	2 X 6.2 Ltr	4053
10014732	Forza	2 x 10 Ltr Case	14.5
10014727	Forza	1000 Ltr Tote	0.83
10014728	Glyfos - Bonar	450 Ltr Tote	15
10014726	Glyfos - Schutz	1000 Schutz Ltr Tote	10

CWS Logistics - Inventory Summary Report

Customer: 1150 - Monsanto Canada Inc. (Production) — **Winnipeg**

Product Code	Description	Unit	Quantity
Pallets	47 x 47 Pallets	Each	247
169898	Round Up Transorb HC MT	115 Ltr Shuttle	726
122589	Round Up Transorb HC MT	450 Ltr Tote	258
123800	Round Up Transorb HC MT	800 Ltr Tote	8
826938	Round Up Ultra II	115 Ltr Shuttle	57
118855	Round Up Ultra MT	450 Ltr Tote	46
199980	Round Up WeatherMax MT	115 Ltr Shuttle	172
144523	Round Up WeatherMax MT	450 Ltr Tote	29
540800	RT 540 MT	800 Ltr Tote	20
998898	RT 540 MT	450 Ltr Tote	96
112233	RT 540 MT	115 Ltr Shuttle	292
365400	RT 540 MT	1150 ltr Tote	1

CWS Logistics - Inventory Summary Report

Customer: 1351 - Syngenta (Rep Product) ***Winnipeg***

Product Code	*Description*	*Unit*	*Quantity*
[illegible]696	Touchdown Total	946 Ltr Tote	1

CWS Logistics - Inventory Summary Report

Customer: 1255 - Cheminova Canada Inc. (Packaging)

Winnipeg

Product Code	Description	Unit	Quantity
10017423	1" Nipple (reducer)	Each	492
10014753	10 L Fluorinated White Jug	Each	974
10014764	10 Ltr plain, non-barrier	Each	40
10014757	2" Buttress Manual Vent Cap	Each	428
10014755	2" Rubber Gasket - Vent Cap	Each	2594
10014724	2" to 1" Reducing Coupler	Each	482
10014790	450 Ltr Bip-Combo Vent-Viton	Each	222
10014777	450 Ltr Tote No-Step Decal	Each	635
10014775	450 Ltr Tote No-Step Door	Each	154
10014725	450 Ltr Tote Pocket Cover	Each	105
10014781	450 LTR Totes - 6" balck HDPE Cap	Each	110
10014795	46 x 46 Pallets	Each	2389
10014760	75F 3/4" camlock adaptor	Each	378
10014774	B-CHBD-2 Check Valve/DT-TC	Each	350
10015719	Bulk Cheminova Glyphosate	Litre	74817.36
10014794	Cap - 63mm induction seal	Each	118
910015719-1000	Cheminova *Bulk on Site* 1000 Ltr	1 Ltr	13555.23
10014746	Clips for Nozzels	Each	626
10011763	Dip Tube Taylor Cain BCHBD2TCC (for Nufos)	Each	5
10015368	DISPLAY - 115 Ltr Drum	115 Ltr	1
10015369	DISPLAY - 450 ltr Tote	450 LTr	1
10014778	Display Cases	Each	5
10014783	Dust Caps - 450 Ltr	Each	333
10014710	Ecobulk Adaptor for Schutz 1000 L	Each	127
10014768	Empty - 115 Ltr Shuttle	115 Ltr Shuttle	11926
10014769	Empty 1000 Ltr Tote - Bonar	1000 Ltr Tote	91
20104EN	Empty 1000 Ltr Tote *Damaged*	1000 Ltr Tote	1
10014752	Empty 450 ltr Tote	450 Ltr Tote	1912
10014761	Empty 450 Ltr Tote *Snyder*	450 Ltr Tote	484
10014780	Empty FORZA	1000 Ltr Tote	83
10014766	Empty Mauser 30 Gal (115L)	115 Ltr Shuttle	1
10015371	Empty RW 1000 Ltr Totes	1000 Ltr Totes	90
10015370	Empty RW 450 Tote	450 Ltr Tote	1
10014792	Empty Schuetz 1000 Ltr Totes	1000 Ltr Totes	3181
10014792-D	Empty Schuetz 1000 Ltr Totes *Damaged*	1000 Ltr Totes	3
10014727	Forza	1000 Ltr Tote	0.33
10015372	Full RW 1000 Ltr Schuetz Tote	1000 Ltr Totes	82
10014711	G2 Plug Solid 2"	Each	59

Product Code	Description	Unit	Quantity
10014673	Glyphosate Wetcake	Tote	15
10014564	Label - Cheminova Glyfos (English)	Each	616
10014563	Label - Cheminova Glyfos (French)	Each	657
10014786	Label - Forza Blank (English)	Each	533
[illegible]014784	Label - Forza Blank (French)	Each	547
10014562	Label - Glyphosate 10 Ltr (English)	Each	2367
10014561	Label - Glyphosate 10 Ltr (french)	Each	2570
10014751	Label - Nufos 4E 10 Ltr (English)	Each	98
10014750	Label - Nufos 4E 10 Ltr (French)	Each	89
10014721	Label - Open Vent	Each	7617
101	Label - Sharpshooter (English)	Each	135
102	Label - Sharpshooter (French)	Each	135
10014718	Label Glyfos Multi-Net (English)	Each	100
10014717	Label Glyfos Multi-Net (French)	Each	25
10014779	Lanyard - Bonar	Each	517
10014776	Parker Hanifin 1" Dry Break	Each	141
10014756	PH Dry Break	Each	24
10014759	PPA 11 3/4" Polyvisegrip plug	Each	963
10014754	Rubber Gaskets - Vent Caps	Each	630
10014716	Schuetz #16651 Outlet Nozzle	Each	331
10014712	Schuetz #425915 Tamper Shield	Each	65
10014715	Schuetz #510939 Screw Cap	Each	379
10014713	Schuetz #860891 Bfly pto Valve	Each	49
10014708	Schutz #16411 Met Screw Cap 50	Each	101
10014747	Schutz 1069497 - Foam Gasket	Each	506
10014714	Screw Cap DN50 2" NPS 3 Piece	Each	417
10014720	Shearing Pin for valve assembly	Each	1844

CWS Logistics - Inventory Summary Report

Customer: 1230 - Wolf Trax

Winnipeg

Product Code	Description	Unit	Quantity
7700C	(Cu) Copper DDP Micronutrient CDN	18.14 Kg Box	59
5001	(P) 1702-2 Phosphate Compound	20 LB Box	237
4070	Boron 12%	2 X 8 Ltr	56.5
4500	Boron 18.5% US	20 Lb Box	493
4500-D	Boron DDP *Damaged*	20 Lb Box	1
4600	Calcium DDP 27%	20 Lb Box	427
4030-20	Copper 20%	20 Ltr Pail	52
DM4030-PJ-S	Copper 20% *Part Jug* *Samples* NOT FOR RESALE	2 X 8 Ltr	1
DM4030-S	Copper 20% *Samples* NOT FOR RESALE	2 X 8 Ltr	12
118	Copper Bag	20 Kg Bag	42
4000	Cropmix DDP Micronutrient US	20 LB Box	851
220	Dry Powder Feeder Fertilizer Applicator	26 Lb Box	5
4400	Iron DDP 47% US	20 Lb Box	1530
DM4060-PJ-S	Manganese 20% *Part Jug* * SAMPLES* NOT FOR RESALE	2 X 8 Ltr	0.5
DM4060-S	Manganese 20% *Samples* NOT FOR RESALE	2 X 8 Ltr	1.5
4300C	Manganese DDP 33% CDN	20 LB Box	40
4300	Manganese DDP 33% US	20 LB Box	559
4901	MSG007-1 (Struvite)	15 KG Bag	48
101	Painted Micro Charges	Each	12
102	Pit Magic	2 X 10 Ltr Case	143
4800	Protinus Seed Nutrient US	20 LB Box	1323
369	Relabel Charge per hour	Minutes	5674
159	Relabel Charge per Unit	Unit	5674
7700	Surfactant C6273	2 X 8 Ltr	9.5
4200C	Zinc DDP 62% CDN	20 LB Box	132
4200	Zinc DDP 62% US	20 LB Box	136

APPENDIX B

CERTIFICATE OF LAND OWNERSHIP

DATE: 2012/09/18
TIME: 22:50

MANITOBA

STATUS OF TITLE

TITLE NO: 2619601/1

PAGE: 1

STATUS OF TITLE.....	ACCEPTED	PRODUCED FOR..	TAYLOR MCCAFFREY LLP
ORIGINATING OFFICE...	WINNIPEG	ADDRESS.....	9TH FLOOR
REGISTERING OFFICE...	WINNIPEG		400 ST. MARY AVENUE
REGISTRATION DATE....	2012/09/11		WINNIPEG MB R3C 4K5
COMPLETION DATE.....	2012/09/18	LTO BOX NO....	139
		CLIENT FILE...	87803-1(MARS/463)
		PRODUCED BY...	SYSTEM for Series: 4269488/1

LEGAL DESCRIPTION:

CWS LOGISTICS LTD.

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED HEREON
IN THE FOLLOWING DESCRIBED LAND:

SP LOT 1 PLAN 23262 WLTO
IN RL 7 TO 10 PARISH OF ST BONIFACE

ACTIVE TITLE CHARGE(S):

164359/1 ACCEPTED — CAVEAT — REG'D: 1955/11/30
DESCRIPTION: AFF LOT 1 AND PT LOT 3
FROM/BY: MAN. POWER COMMISSION
TO:
CONSIDERATION: NOTES:

170991/1 ACCEPTED — CAVEAT — REG'D: 1958/04/29
FROM/BY: MANITOBA TELEPHONE SYSTEM
TO:
CONSIDERATION: NOTES:

174592/1 ACCEPTED — CAVEAT — REG'D: 1959/07/14
FROM/BY: MAN. POWER COMMISSION
TO:
CONSIDERATION: NOTES:

174593/1 ACCEPTED — CAVEAT — REG'D: 1959/07/14
FROM/BY: MAN. TELEPHONE SYSTEM
TO:
CONSIDERATION: NOTES:

174997/1 ACCEPTED — CAVEAT — REG'D: 1959/09/09
FROM/BY: MAN. POWER COMMISSION
TO:
CONSIDERATION: NOTES:

174998/1 ACCEPTED — CAVEAT — REG'D: 1959/09/09
FROM/BY: MANITOBA TELEPHONE SYSTEM
TO:
CONSIDERATION: NOTES:

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA
STORAGE SYSTEM ON 2012/09/18 OF TITLE NUMBER 2619601/1

********** STATUS OF TITLE 2619601/1 CONTINUED ON NEXT PAGE **********

STATUS OF TITLE.....	ACCEPTED	PRODUCED FOR..	TAYLOR MCCAFFREY LLP
ORIGINATING OFFICE...	WINNIPEG	ADDRESS.....	9TH FLOOR
REGISTERING OFFICE...	WINNIPEG		400 ST. MARY AVENUE
REGISTRATION DATE....	2012/09/11		WINNIPEG MB R3C 4K5
COMPLETION DATE.....	2012/09/18	LTO BOX NO....	139
		CLIENT FILE...	87803-1(MARS/463)
		PRODUCED BY...	SYSTEM for Series: 4269488/1

ACTIVE TITLE CHARGE(S):

202103/1 ACCEPTED — CAVEAT — REG'D: 1966/06/06
DESCRIPTION: AFFECTS N 10 FT PERP
FROM/BY: MAN TELEPHONE SYSTEM
TO:
CONSIDERATION: NOTES:

212311/1 ACCEPTED — CAVEAT — REG'D: 1969/06/03
DESCRIPTION: AFFECTS S 10 FEET PERP
FROM/BY: MAN. HYDRO ELECTRIC BOARD/MAN. TELEPHONE SYSTEM
TO:
CONSIDERATION: NOTES:

4269489/1 ACCEPTED — MORTGAGE — REG'D: 2012/09/11
FROM/BY: CWS LOGISTICS LTD.
TO: CONCENTRA FINANCIAL SERVICES ASSOCIATION
CONSIDERATION: $35,000,000.00 NOTES:

4269490/1 ACCEPTED — CAVEAT — REG'D: 2012/09/11
DESCRIPTION: ASSIGNMENT OF LEASES AND RENTS
FROM/BY: CONCENTRA FINANCIAL SERVICES ASSOCIATION
TO: A. DAVID MARSHALL AS AGENT
CONSIDERATION: NOTES:

ADDRESS(ES) FOR SERVICE:

EFFECT	NAME AND ADDRESS	POSTAL CODE
ACTIVE	CWS LOGISTICS LTD. 10 - 75 SCURFIELD BLVD WINNIPEG MB	R3Y 1P6

ORIGINATING INSTRUMENT(S):

REGISTRATION NUMBER	TYPE	REG. DATE	CONSIDERATION	SWORN VALUE
4269488/1	T	2012/09/11	$7,840,000.00	$7,840,000.00

PRESENTED BY: TAYLOR MCCAFFREY LLP
FROM: SONOCO FLEXIBLE PACKAGING CANADA CORPORATION, ETC.
TO: CWS LOGISTICS LTD.

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA
STORAGE SYSTEM ON 2012/09/18 OF TITLE NUMBER 2619601/1

********** STATUS OF TITLE 2619601/1 CONTINUED ON NEXT PAGE **********

STATUS OF TITLE.....	ACCEPTED	PRODUCED FOR..	TAYLOR MCCAFFREY LLP
ORIGINATING OFFICE...	WINNIPEG	ADDRESS.....	9TH FLOOR
REGISTERING OFFICE...	WINNIPEG		400 ST. MARY AVENUE
REGISTRATION DATE....	2012/09/11		WINNIPEG MB R3C 4K5
COMPLETION DATE.....	2012/09/18	LTO BOX NO....	139
		CLIENT FILE...	87803-1(MARS/463)
		PRODUCED BY...	SYSTEM for Series: 4269488/1

FROM TITLE NUMBER(S):

1752470/1 ALL

LAND INDEX:

LOT	BLOCK	SURVEY PLAN
1		23262

NOTE:

ACCEPTED THIS 11TH DAY OF SEPTEMBER, 2012
BY F.GREENGRASS FOR THE DISTRICT REGISTRAR OF
THE LAND TITLES DISTRICT OF WINNIPEG.

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA
STORAGE SYSTEM ON 2012/09/18 OF TITLE NUMBER 2619601/1.

********** END OF STATUS OF TITLE 2619601/1 **********

APPENDIX C

WATER WELL INFORMATION

LOCATION: RIVER LOT 0001 IN PARISH OF St. Boniface

Well_PID: 109874
Owner: SHERWOOD PARK HOMES/INVESTORS GROUP
Driller: Selkirk Drillers
Well Name: HEAT PUMP
Well Use: RECHARGE
Water Use:
UTMX: 644936.96
UTMY: 5520681.15
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 1998 Sep 02

WELL LOG

From (ft.)	To (ft.)	Log
0	38.0	GREY CLAY
38.0	65.0	TILL
65.0	69.0	LIMESTONE LAYERS AND TILL
69.0	320.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	71.0	CASING	5.00			INSERT	PVC
71.0	320.0	OPEN HOLE	4.50				
		CASING GROUT					CEMENT

Top of Casing: 1.0 ft. above ground

PUMPING TEST

Date: 1998 Sep 02
Pumping Rate: 180.0 Imp. gallons/minute
Water level before pumping: 34.8 ft. below ground
Pumping level at end of test: 44.5 ft. below ground
Test duration: 2 hours, minutes
Water temperature: ?? degrees F

REMARKS

1345 WAVERLEY, SW WAVERLEY & MCGILLIVRAY

LOCATION: RIVER LOT 0001 IN PARISH OF St. Boniface

Well_PID: 109872
Owner: SHERWOOD PARK HOMES/INVESTORS GROUP

Driller: Selkirk Drillers
Well Name: HEAT PUMP 1
Well Use: PRODUCTION
Water Use: Other
UTMX: 644936.96
UTMY: 5520681.15
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 1998 Aug 26

WELL LOG

From (ft.)	To (ft.)	Log
0	38.0	GREY CLAY
38.0	62.0	TILL
62.0	69.0	LIMESTONE LAYERS AND TILL
69.0	220.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	70.0	CASING	5.00			INSERT	PVC
70.0	220.0	OPEN HOLE	4.50				
		CASING GROUT					CEMENT

Top of Casing: 1.0 ft. above ground

PUMPING TEST

Date: 1998 Aug 26
Pumping Rate: 50.0 Imp. gallons/minute
Water level before pumping: 35.0 ft. below ground
Pumping level at end of test: 47.0 ft. below ground
Test duration: 2 hours, minutes
Water temperature: ?? degrees F

REMARKS

1345 WAVERLEY, SW WAVERLEY & MCGILLIVRAY

LOCATION: RIVER LOT 0001 IN PARISH OF St. Boniface

Well_PID: 109873
Owner: SHERWOOD PARK HOMES/INVESTORS GROUP
Driller: Selkirk Drillers
Well Name: HEAT PUMP 2
Well Use: PRODUCTION
Water Use: Other

UTMX: 644936.96
UTMY: 5520681.15
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 1998 Aug 28

WELL LOG

From (ft.)	To (ft.)	Log
0	38.0	GREY CLAY
38.0	64.0	TILL
64.0	69.0	LIMESTONE LAYERS AND TILL
69.0	220.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	70.0	CASING	5.00			INSERT	PVC
70.0	220.0	OPEN HOLE	4.50				
		CASING GROUT					CEMENT

Top of Casing: 1.0 ft. above ground

PUMPING TEST

Date: 1998 Aug 28
Pumping Rate: 50.0 Imp. gallons/minute
Water level before pumping: 37.0 ft. below ground
Pumping level at end of test: 54.5 ft. below ground
Test duration: 3 hours, minutes
Water temperature: ?? degrees F

REMARKS

1345 WAVERLEY, SW WAVERLEY & MCGILLIVRAY

LOCATION: RIVER LOT 1 IN PARISH OF St. Boniface

Well_PID: 117041
Owner: CANADIAN INOVATECH INC.
Driller: Friesen Drillers Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 644936.96
UTMY: 5520681.15
Accuracy XY:
UTMZ:
Accuracy Z:

Date Completed: 2001 May 11

WELL LOG

From (ft.)	To (ft.)	Log
0	2.0	FILL
2.0	48.0	CLAY
48.0	53.0	TILL
53.0	220.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	57.5	CASING	8.00	8.70		INSERT	PVC
57.5	220.0	OPEN HOLE	7.50				
0	57.5	CASING GROUT					CEMENT

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 2001 May 14
Rate: ?? Imp. gallons/minute
Water level before pumping: 18.5 ft. below ground
Pumping level at end of test: 50.3 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

70 IRENE ST., WINNIPEG.

LOCATION: RIVER LOT 4 IN PARISH OF St. Boniface

Well_PID: 72171
Owner: INOVATECH
Driller: Echo Drilling Ltd.
Well Name:
Well Use: RECHARGE
Water Use: Industrial
UTMX: 644869.211
UTMY: 5521944.12
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1991 Oct 01

WELL LOG

From (ft.)	To (ft.)	Log

0	3.0	PAVEMENT AND FILL
3.0	48.0	CLAY
48.0	59.0	TILL
59.0	219.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	60.0	casing	6.50			INSERT	BLACK IRON
60.0	219.9	open hole	5.50				
4.0	59.0	casing grout					casing

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date:	1992 Apr 22
Pumping Rate:	90.0 Imp. gallons/minute
Water level before pumping:	27.0 ft. below ground
Pumping level at end of test:	31.0 ft. below ground
Test duration:	hours, minutes
Water temperature:	?? degrees F

REMARKS

70 IRENE ST, ORIGINAL PUMP TEST 80 IGPM FOR 1 HR, SWL 34.5 FT, PL 31.4 FT. PREVIOUS OWNER-EXPORT PACKERS

LOCATION: RIVER LOT 4 IN PARISH OF St. Boniface

Well_PID:	72150
Owner:	INOVATECH
Driller:	Echo Drilling Ltd.
Well Name:	
Well Use:	PRODUCTION
Water Use:	Industrial
UTMX:	644869.211
UTMY:	5521944.12
Accuracy XY:	UNKNOWN
UTMZ:	
Accuracy Z:	
Date Completed:	1991 Sep 25

WELL LOG

From (ft.)	To (ft.)	Log
0	5.0	PAVEMENT AND FILL
5.0	48.0	CLAY

48.0	58.0	TILL
58.0	139.9	LIMESTONE; FRACTURES 96, 110-120 FEET

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	59.0	casing	6.50			INSERT	BLACK IRON
59.0	139.9	open hole	5.50				

Top of Casing: 1.0 ft. above ground

PUMPING TEST

Date:	1991 Sep 25
Pumping Rate:	83.7 Imp. gallons/minute
Water level before pumping:	34.0 ft. below ground
Pumping level at end of test:	38.0 ft. below ground
Test duration:	1 hours, minutes
Water temperature:	?? degrees F

REMARKS

70 IRENE ST, 7 HR PUMP TEST AT 400 US GPM ON JUNE 18/92 CHEMICAL ANALYSIS 1996. PREVIOUS OWNER- EXPORT PACKERS

LOCATION: RIVER LOT 10 IN PARISH OF St. Boniface

Well_PID:	9174
Owner:	LIGHTING MATERIALS
Driller:	SONIC DRILLING CO. LTD
Well Name:	
Well Use:	PRODUCTION
Water Use:	Industrial
UTMX:	644805.92
UTMY:	5524350.66
Accuracy XY:	UNKNOWN
UTMZ:	
Accuracy Z:	
Date Completed:	1966 May 21

WELL LOG

From (ft.)	To (ft.)	Log
0	7.0	BLACK LOAM
7.0	44.0	SOFT STONY CLAY
44.0	46.0	HARDPAN, BOULDERS
46.0	49.0	FINE GRAVEL
49.0	56.0	SHATTERED LIMESTONE

56.0	194.9	HARD LIMESTONE WITH WATER FISSURES AT 63, 97, 118, 131-145 AND 187 FEET

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	58.4	casing	8.00				
58.4	194.9	open hole					

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 149.9 Imp. gallons/minute
Water level before pumping: 19.0 ft. below ground
Pumping level at end of test: 46.0 ft. below ground
Test duration: 8 hours, minutes
Water temperature: ?? degrees F

REMARKS

CORNER OF SEEL + FENNEL STREETS, NE CORNER OF BUILDING, WATER RIGHTS FILE 10.1.6, GROUND LEVEL ELEV EST 763 FT, CHEMICAL ANALYSIS (1966)

LOCATION: RIVER LOT 10 IN PARISH OF St. Boniface

Well_PID: 9175
Owner: LIGHTING MATERIALS
Driller: SONIC DRILLING CO. LTD
Well Name:
Well Use: RECHARGE
Water Use: Industrial
UTMX: 644805.92
UTMY: 5524350.66
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1966 May 28

WELL LOG

From (ft.)	To (ft.)	Log
0	6.0	TOPSOIL
6.0	45.0	DARK BROWN CLAY
45.0	50.0	HARDPAN, BOULDERS AND GRAVEL
50.0	53.0	SHATTERED LIMESTONE
53.0	108.9	HARD LIMESTONE, WATER FISSURES AT 58-59, 62-63, 66-66.5 AND 107 FEET

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	55.2	casing	8.00				
55.2	108.9	open hole					

Top of Casing: ft. below ground

PUMPING TEST

Date: 1966 May 28
Pumping Rate: 105.0 Imp. gallons/minute
Water level before pumping: 20.0 ft. below ground
Pumping level at end of test: 46.0 ft. below ground
Test duration: 10 hours, minutes
Water temperature: ?? degrees F

REMARKS

CORNER OF FENNEL + SEEL, NW CORNER OF BUILDING GROUND LEVEL ELEV EST 765 FT

LOCATION: RIVER LOT 0023 IN PARISH OF St. Boniface

Well_PID: 140479
Owner: WINNIPEG HUMANE SOCIETY
Driller: Friesen Drillers Ltd.
Well Name: PUMP WELL
Well Use: PRODUCTION
Water Use: Air conditioning
UTMX: 644362.852
UTMY: 5526009.54
Accuracy XY: 5 GENERAL [1KM-8KM] [WITHIN TOWNSHIP]
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 2006 Feb 02

WELL LOG

From (ft.)	To (ft.)	Log
0	4.0	PEAT
4.0	31.0	CLAY
31.0	60.0	TILL
60.0	140.0	LIMESTONE (FRACTURES AND VOIDS AT 130 TO 140 FEET.)

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material

0	63.0	CASING	8.00	8.75	WELDED	STEEL
63.0	140.0	OPEN HOLE	7.80			

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date:	2006 Feb 02
Pumping Rate:	308.0 Imp. gallons/minute
Water level before pumping:	26.6 ft. below ground
Pumping level at end of test:	57.0 ft. below ground
Test duration:	??? hours, ?? minutes
Water temperature:	?? degrees F

REMARKS

OVERDRILLED TH-4, WINNIPEG HUMANE SOCIETY GEOTHERMAL SYSTEM. RETURN WELL, MUST BE VENTED.

LOCATION: RIVER LOT 0023 IN PARISH OF St. Boniface

Well_PID:	134531
Owner:	WINNIPEG HUMANE SOCIETY
Driller:	Friesen Drillers Ltd.
Well Name:	TH #1
Well Use:	TEST WELL
Water Use:	
UTMX:	644362.852
UTMY:	5526009.54
Accuracy XY:	
UTMZ:	
Accuracy Z:	
Date Completed:	2005 Sep 27

WELL LOG

From (ft.)	To (ft.)	Log
0	40.0	CLAY
40.0	53.0	TILL
53.0	65.0	SAND AND GRAVEL
65.0	200.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	68.0	CASING	5.00			INSERT	PVC
68.0	200.0	OPEN HOLE	4.50				

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date:	2005 Sep 27
Pumping Rate:	85.0 Imp. gallons/minute
Water level before pumping:	30.0 ft. below ground
Pumping level at end of test:	67.1 ft. below ground
Test duration:	1 hours, minutes
Water temperature:	?? degrees F

REMARKS

N SIDE HURST WAY, INVESTIGATION FOR GEOTHERMAL HEATING/COOLING, COCHRANE ENGINEERING

LOCATION: RIVER LOT 0023 IN PARISH OF St. Boniface

Well_PID:	134534
Owner:	WINNIPEG HUMANE SOCIETY
Driller:	Friesen Drillers Ltd.
Well Name:	TH #3
Well Use:	TEST WELL
Water Use:	
UTMX:	644362.852
UTMY:	5526009.54
Accuracy XY:	
UTMZ:	
Accuracy Z:	
Date Completed:	2005 Dec 16

WELL LOG

From (ft.)	To (ft.)	Log
0	4.0	PEAT
4.0	31.0	CLAY
31.0	60.0	TILL
60.0	200.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	66.0	CASING	5.00			INSERT	PVC
66.0	200.0	OPEN HOLE	4.80				

Top of Casing: 2.5 ft. above ground

PUMPING TEST

Date: 2005 Dec 16

Pumping Rate: 67.0 Imp. gallons/minute
Water level before pumping: 28.0 ft. below ground
Pumping level at end of test: 41.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

N SIDE HURST WAY, INVESTIGATION FOR GEOTHERMAL HEATING/COOING

LOCATION: RIVER LOT 0023 IN PARISH OF St. Boniface

Well_PID: 134535
Owner: WINNIPEG HUMANE SOCIETY
Driller: Friesen Drillers Ltd.
Well Name: TH #4
Well Use: TEST WELL
Water Use:
UTMX: 644362.852
UTMY: 5526009.54
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2005 Dec 20

WELL LOG

From (ft.)	To (ft.)	Log
0	4.0	PEAT
4.0	31.0	CLAY
31.0	60.0	TILL
60.0	200.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	64.0	CASING	5.00			INSERT	PVC
64.0	200.0	OPEN HOLE	4.80				

Top of Casing: 2.5 ft. above ground

PUMPING TEST

Date: 2005 Dec 20
Pumping Rate: 100.0 Imp. gallons/minute
Water level before pumping: 26.0 ft. below ground
Pumping level at end of test: 36.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

N SIDE HURST WAY, INVESTIGATION FOR GEOTHERMAL HEATING/COOLING

LOCATION: RIVER LOT 0046 IN PARISH OF St. Boniface

Well_PID: 134532
Owner: WINNIPEG HUMANE SOCIETY
Driller: Friesen Drillers Ltd.
Well Name: TH #2
Well Use: TEST WELL
Water Use:
UTMX: 643990.978
UTMY: 5524322.29
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2005 Sep 28

WELL LOG

From (ft.)	To (ft.)	Log
0	40.0	CLAY
40.0	50.0	TILL
50.0	60.0	SAND AND GRAVEL
60.0	200.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	62.0	CASING	5.00			INSERT	PVC
62.0	200.0	OPEN HOLE	4.50				

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2005 Sep 28
Pumping Rate: 85.0 Imp. gallons/minute
Water level before pumping: 40.5 ft. below ground
Pumping level at end of test: 41.8 ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

N SIDE HURST WAY, INVESTIGATION FOR GETHERMAL HEATING/COOLING,

COCHRANE ENGINEERING

LOCATION: RIVER LOT 0047 IN PARISH OF St. Boniface

Well_PID: 108610
Owner: THE WAVERLEY
Driller: Maple Leaf Enterprises LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Irrigation
UTMX: 643987.838
UTMY: 5524759.02
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 1998 Sep 01

WELL LOG

From (ft.)	To (ft.)	Log
0	22.0	BROWN CLAY
22.0	50.0	CLAY, GREY
50.0	64.0	TILL
64.0	113.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	66.0	CASING	5.00				
66.0	113.0	OPEN HOLE		4.30			
0	50.0	CASING GROUT					

BENTONITE

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 1998 Sep 01
Pumping Rate: 15.0 Imp. gallons/minute
Water level before pumping: 40.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

857 WILKES AVE AT WAVERLEY

LOCATION: RIVER LOT 0050 IN PARISH OF St. Boniface

Well_PID: 55324
Owner: CAN-HEAT
Driller: HYGAARD'S WELL DRILLING
Well Name: HEAT PUMP
Well Use: RECHARGE
Water Use:
UTMX: 643945.302
UTMY: 5525993.83
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1985 Jul 27

WELL LOG

From (ft.)	To (ft.)	Log
0	52.0	CLAY; GREY
52.0	72.0	TILL AND BOULDERS
72.0	119.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	74.0	casing	4.20			INSERT	GALVANIZED
74.0	119.9	open hole	4.00				

Top of Casing: 1.0 ft. above ground

PUMPING TEST

Date: 1985 Jul 27
Pumping Rate: 18.0 Imp. gallons/minute
Water level before pumping: 37.0 ft. below ground
Pumping level at end of test: 47.0 ft. below ground
Test duration: hours, 30 minutes
Water temperature: ?? degrees F

REMARKS

113 SHORECREST, LINDEN WOODS

LOCATION: RIVER LOT 0050 IN PARISH OF St. Boniface

Well_PID: 55325

Owner: CAN-HEAT
Driller: HYGAARD'S WELL DRILLING
Well Name: HEAT PUMP
Well Use: PRODUCTION
Water Use: Air Conditioning
UTMX: 643945.302
UTMY: 5525993.83
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1985 Jul 25

WELL LOG

From (ft.)	To (ft.)	Log
0	52.0	CLAY; GREY
52.0	62.0	TILL AND BOULDERS
62.0	119.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	63.0	casing	4.20			INSERT	GALVANIZED
63.0	119.9	open hole	4.00				

Top of Casing: 1.0 ft. above ground

PUMPING TEST

Date: 1985 Jul 25
Pumping Rate: 18.0 Imp. gallons/minute
Water level before pumping: 37.0 ft. below ground
Pumping level at end of test: 47.0 ft. below ground
Test duration: hours, 30 minutes
Water temperature: ?? degrees F

REMARKS

113 SHORECREST, LINDEN WOODS

LOCATION: RIVER LOT 0050 IN PARISH OF St. Boniface

Well_PID: 60325
Owner: VAN WALLEGHEM SCHOOL
Driller: Echo Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Air Conditioning

UTMX: 643945.302
UTMY: 5525993.83
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 1987 Mar 03

WELL LOG

From (ft.)	To (ft.)	Log
0	33.0	CLAY
33.0	55.0	TILL
55.0	199.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	55.0	casing	7.00			INSERT	BLACK IRON
55.0	199.9	open hole	6.20				
0	53.0	casing grout					CEMENT

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 1987 Mar 03
Pumping Rate: 206.9 Imp. gallons/minute
Water level before pumping: 9.0 ft. below ground
Pumping level at end of test: 11.0 ft. below ground
Test duration: 12 hours, minutes
Water temperature: ?? degrees F

REMARKS

#1 PRINCEMERE ROAD, S.W. BLDG. WATER @ 56 FT. 83-90, 120-125, 190
PUMP TEST DATA FILE, CHEMICAL ANALYSIS

LOCATION: RIVER LOT 0050 IN PARISH OF St. Boniface

Well_PID: 150771
Owner: PEMBINA TRAILS SCHOOL DIVISION
Driller: Maple Leaf Enterprises LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Air conditioning
UTMX: 603476
UTMY: 5522430
Accuracy XY: 2 VERY ACCURATE [<50M] [ORTHO MAPPED]

UTMZ: 233
Accuracy Z: 5 General - Shuttle at Centroid
Date Completed: 2008 Apr 29

WELL LOG

From (ft.)	To (ft.)	Log
0	6.0	HARD TAP
6.0	24.0	BROWN CLAY
24.0	33.0	GREY CLAY
33.0	40.0	GREY CLAY WITH TRACES OF SAND
40.0	43.0	SOFT SILT TILL
43.0	49.0	STONY TILL
49.0	50.0	LIMESTONE BOULDER
50.0	53.0	LIMESTONE BOULDER (ROUGH DRILLING)
53.0	54.0	LIMESTONE GRAVEL WITH TILL
54.0	55.0	FRACTURES
55.0	56.0	LIMESTONE
56.0	70.0	FRACTURED INTERVALS
70.0	75.0	LIMESTONE
75.0	76.0	SOFT RED LIMESTONE
76.0	87.0	LIMESTONE
87.0	95.0	VERY HARD SOLID GREY LIMESTONE
95.0	120.0	SOFTER OFF WHITE TO LIGHT BROWN LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	55.0	CASING	7.75			WELDED	PVC
45.0	55.0	CASING GROUT					
40.0	45.0	CASING GROUT					
BENTONITE							
5.0	40.0	CASING GROUT					CEMENT
55.0	120.0	OPEN HOLE	6.25				

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2008 May 22
Pumping Rate: 220.0 Imp. gallons/minute
Water level before pumping: 24.0 ft. below ground
Pumping level at end of test: 43.0 ft. below ground
Test duration: 2 hours, minutes
Water temperature: ?? degrees F

REMARKS

VAN WALLEGHEM SCHOLL, 1 PRINCEMERE. WELL IS SOUTH OF SCHOOL, EAST OF OLD WELL. PUMPED AT 100 GPM AT 44' AND 87' DEEP. CASED THROUGH 2 FRACTURES IN SOFT LIMESTONE, 54-55' (ABOVE BOTTOM OF CASING). PUMPED AT 220 GPM AT 42' AND 120' DEEP.

LOCATION: RIVER LOT 0050 IN PARISH OF St. Boniface

Well_PID: 60330
Owner: VAN WALLEGHEM SCHOOL
Driller: Echo Drilling Ltd.
Well Name:
Well Use: RECHARGE
Water Use: Air Conditioning
UTMX: 643945.302
UTMY: 5525993.83
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1987 Mar 04

WELL LOG

From (ft.)	To (ft.)	Log
0	35.0	CLAY
35.0	54.0	TILL
54.0	199.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	55.0	casing	7.00			INSERT	BLACK IRON
55.0	199.9	open hole	6.20				
0	55.0	casing grout					CEMENT

Top of Casing: 1.0 ft. above ground

PUMPING TEST

Date: 1987 Mar 04
Pumping Rate: 210.9 Imp. gallons/minute
Water level before pumping: 9.0 ft. below ground
Pumping level at end of test: 11.0 ft. below ground
Test duration: 12 hours, minutes
Water temperature: ?? degrees F

REMARKS

#1 PRINCEMERE ROAD, N.E WATER @ 59, 1308 193 FT. PUMP TEST DATA FILE, CHEMICAL ANALYSIS

LOCATION: RIVER LOT 0006 IN PARISH OF St. Boniface

Well_PID: 126170
Owner: SMITH CARTER ARCHITECTS & ENGINEERS INC.
Driller: Friesen Drillers Ltd.
Well Name: RECHARGE TEST WELL #1
Well Use: TEST WELL
Water Use: Air conditioning
UTMX: 644854.93
UTMY: 5522748.49
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2003 Mar 28

WELL LOG

From (ft.)	To (ft.)	Log
0	43.0	CLAY
43.0	58.0	SILTY TILL
58.0	300.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	59.0	CASING	5.00	5.50		INSERT	PVC
59.0	300.0	OPEN HOLE	4.75				

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2003 Mar 27
Pumping Rate: 85.0 Imp. gallons/minute
Water level before pumping: 8.4 ft. below ground
Pumping level at end of test: 14.8 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

1601 BUFFALO PL. MINOR FRACTURES 60-80 FEET, 110-120 FEET. LOCATED EAST SIDE OF LOT APPROX. 320M NE OF SUPPLY TEST WELL #1.

LOCATION: RIVER LOT 0006 IN PARISH OF St. Boniface

Well_PID: 126171
Owner: SMITH CARTER ARCHITECTS & ENGINEERS INC.
Driller: Friesen Drillers Ltd.

Well Name:
Well Use: TEST WELL
Water Use: Air conditioning
UTMX: 644854.93
UTMY: 5522748.49
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2003 Mar 27

WELL LOG

From (ft.)	To (ft.)	Log
0	45.0	CLAY
45.0	54.0	SILTY TILL
54.0	140.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	55.0	CASING	5.00	5.50		INSERT	PVC
55.0	140.0	OPEN HOLE	4.75				

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2003 Mar 27
Pumping Rate: 85.0 Imp. gallons/minute
Water level before pumping: 8.1 ft. below ground
Pumping level at end of test: 8.8 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

1601 BUFFALO PL. FRACTURES 54-60, 108-115, 130-140 FEET. LOCATED AT EAST SIDE OF LOT APPROX 200M SW OF EXISTING SUPPLY WELL. PROPOSED PUMPING WELL FOR HEAT PUMP, TEMP 7 DEGREES CELCIUS.

LOCATION: RIVER LOT 0006 IN PARISH OF St. Boniface

Well_PID: 125963
Owner: SMITH CARTER ARCHITECHS & ENGINEERS INC.
Driller: Friesen Drillers Ltd.
Well Name:
Well Use: TEST WELL
Water Use: Other
UTMX: 644854.93

UTMY: 5522748.49
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2003 Aug 20

WELL LOG

From (ft.)	To (ft.)	Log
0	37.0	CLAY
37.0	52.0	TILL
52.0	340.0	CARBONATE ROCK

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	55.0	CASING	5.00	5.50		INSERT	PVC
55.0	240.0	OPEN HOLE	4.75				

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2003 Aug 20
Pumping Rate: 95.0 Imp. gallons/minute
Water level before pumping: 34.0 ft. below ground
Pumping level at end of test: 49.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

LOCATION: RIVER LOT 0006 IN PARISH OF St. Boniface

Well_PID: 125821
Owner: SMITH CARTER ARCHITECTS & ENGINEERING INC.
Driller: Friesen Drillers Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Air conditioning
UTMX: 644854.93
UTMY: 5522748.49
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2003 Sep 08

WELL LOG

From (ft.)	To (ft.)	Log

0	37.0	CLAY
37.0	52.0	TILL
52.0	200.0	CARBONATE BEDROCK

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	55.0	CASING	8.00			INSERT	PVC
55.0	200.0	OPEN HOLE	6.25				
10.0	55.0	CASING GROUT					CEMENT

Top of Casing: 2.0 ft. above ground

No pump test data for this well.

REMARKS

CORNER OF WAVERLEY AND MCGILLVRAY. RETURN WELL - MCGILLVARY BLVD. SIDE OF PROPERTY, 5" WELL OVERDRILLED TO 8", FOR PUMP TEST DATA SEE UMA ENGINEERING.

LOCATION: RIVER LOT 0006 IN PARISH OF St. Boniface

Well_PID: 125819
Owner: SMITH CARTER ARCHITECTS AND ENGINEERS INC.
Driller: Friesen Drillers Ltd.
Well Name:
Well Use: TEST WELL
Water Use: Air conditioning
UTMX: 644854.93
UTMY: 5522748.49
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2003 Mar 28

WELL LOG

From (ft.)	To (ft.)	Log
0	43.0	CLAY
43.0	58.0	SILTY TILL
58.0	300.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	59.0	CASING	5.00	5.50		INSERT	PVC
59.0	300.0	OPEN HOLE	4.75				

0	59.0	CASING GROUT	CEMENT

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date:	2003 Mar 28
Pumping Rate:	85.0 Imp. gallons/minute
Water level before pumping:	8.4 ft. below ground
Pumping level at end of test:	14.8 ft. below ground
Test duration:	??? hours, ?? minutes
Water temperature:	?? degrees F

REMARKS

1601 BUFFALO PLACE. MINOR FRACTURES 60-80, 110-120. EAST SIDE OF LOT APPROX 320 M NE OF SUPPLY TEST WELL #1.

LOCATION: RIVER LOT 0006 IN PARISH OF St. Boniface

Well_PID:	125820
Owner:	SMITH CARTER ARCHITECTS & ENGINEERS INC.
Driller:	Friesen Drillers Ltd.
Well Name:	
Well Use:	PRODUCTION
Water Use:	Air conditioning
UTMX:	644854.93
UTMY:	5522748.49
Accuracy XY:	
UTMZ:	
Accuracy Z:	
Date Completed:	2003 Sep 18

WELL LOG

From (ft.)	To (ft.)	Log
0	38.0	CLAY
38.0	53.0	TILL
53.0	157.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	56.0	CASING	5.00	5.50		INSERT	PVC
56.0	157.0	OPEN HOLE	6.25				
10.0	56.0	CASING GROUT					CEMENT

Top of Casing: 2.0 ft. above ground

No pump test data for this well.

REMARKS

CORNER OF WAVERLEY AND MCGILLVRAY. SUPPLY WELL- WEST SIDE OF LOT. 5" TEST WELL OVERDRILLED TO 8". FOR PUMP TEST DATA SEE UMA ENGINEERING.

LOCATION: RIVER LOT 0007 IN PARISH OF St. Boniface

Well_PID: 30541
Owner: SMITH CARTER/WRB
Driller: Friesen Drillers Ltd.
Well Name: G05OC032 GM229 SMITH CARTER IN
Well Use: PRODUCTION
Water Use: Air Conditioning
UTMX: 631024
UTMY: 5521806
Accuracy XY: 1 EXACT [<5M] [GPS]
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 1977 Nov 07

WELL LOG

From (ft.)	To (ft.)	Log
0	34.0	CLAY
34.0	58.0	TILL
58.0	154.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	59.0	casing	8.00			WELDED	BLACK IRON
59.0	154.9	open hole	7.90				

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 70.0 Imp. gallons/minute
Water level before pumping: 30.0 ft. below ground
Pumping level at end of test: 56.0 ft. below ground
Test duration: 4 hours, minutes
Water temperature: ?? degrees F

REMARKS

WINNIPEG REGION - PREVIOUSLY USED AS A WRB MONITORING STATION FOR WATER QUALITY (1977-2003) & TEMPERATURE (1978-2003). 1190 WAVERLEY ST.

LOCATION: RIVER LOT 0007 IN PARISH OF St. Boniface

Well_PID: 30540
Owner: SMITH CARTER/WRB
Driller: Friesen Drillers Ltd.
Well Name: G05OC033 GM230 (OUT) SMITH
Well Use: PRODUCTION
Water Use: Air Conditioning
UTMX: 630992
UTMY: 5521789
Accuracy XY: 2 VERY ACCURATE [<50M] [ORTHO MAPPED]
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 1977 Nov 05

WELL LOG

From (ft.)	To (ft.)	Log
0	34.0	CLAY
34.0	56.0	TILL
56.0	132.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	57.0	casing	6.00				
56.0	132.9	open hole	5.90				

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 100.0 Imp. gallons/minute
Water level before pumping: 30.0 ft. below ground
Pumping level at end of test: 46.0 ft. below ground
Test duration: 6 hours, minutes
Water temperature: ?? degrees F

REMARKS

WINNIPEG REGION - PREVIOUSLY USED AS A WRB MONITORING STATION FOR WATER QUALITY (1977-1989) & TEMPERATURE (1978-1990). UTM COORDINATES FROM CITY OF WINNIPEG ADDRESS TABLE (2008). 1190 WAVERLEY ST

LOCATION: RIVER LOT 0007 IN PARISH OF St. Boniface

Well_PID: 38306
Owner: CANADA WIRE & CABLE/WRB
Driller: Friesen Drillers Ltd.
Well Name: G05OC034 M242 CANADA WIRE RTRN
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 631708
UTMY: 5522277
Accuracy XY: 1 EXACT [<5M] [GPS]
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 1979 Sep 01

WELL LOG

From (ft.)	To (ft.)	Log
0	55.0	CLAY; GREY
55.0	58.0	TILL; STONY
58.0	84.9	LIMESTONE; FRACTURED
84.9	114.9	LIMESTONE; HARD
114.9	124.9	LIMESTONE; FRACTURED
124.9	229.8	LIMESTONE; HARD

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	60.0	casing	7.00				
60.0	229.8	open hole	6.10				
0	0	casing grout					

Top of Casing: ft. below ground

PUMPING TEST

Date: 1979 Sep 01
Pumping Rate: 100.0 Imp. gallons/minute
Water level before pumping: 28.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 6 hours, minutes
Water temperature: 46.400 degrees F

REMARKS

WINNIPEG REGION - PREVIOUSLY USED AS A WRB MONITORING STATION FOR WATER QUALITY (1980-2002) & TEMPERATURE (1980-2002). NE CORNER OF

BUILDING, WELL ORIGINALLY WAS RECHARGE WELL BUT BECAME SUPPLY WELL ON JAN/88. WELL WAS ORIGINALLY 135 FT BUT DEEPENED TO 230 FT ON SEPT 10/87 BY FRIESEN DRILLERS, E-LOGGED AND CALIPER LOGED FILE M-242 UNTIL JAN/88. NOW M-244.

LOCATION: RIVER LOT 0007 IN PARISH OF St. Boniface

Well_PID: 38307
Owner: CANADA WIRE & CABLE/WRB
Driller: Friesen Drillers Ltd.
Well Name: G05OC035 M244 SOUTH SUPPLY
Well Use: RECHARGE
Water Use: Industrial
UTMX: 631682
UTMY: 5522328
Accuracy XY: 2 VERY ACCURATE [<50M] [ORTHO MAPPED]
UTMZ: 234
Accuracy Z: 5 General - Shuttle at Centroid
Date Completed: 1979 Sep 01

WELL LOG

From (ft.)	To (ft.)	Log
0	42.0	CLAY; GREY,SOFT
42.0	48.0	TILL; STONY
48.0	56.0	BOULDERS
56.0	99.9	LIMESTONE; FRACTURED
99.9	109.9	LIMESTONE; HARD
109.9	124.9	LIMESTONE; FRACTURED
124.9	245.0	LIMESTONE; HARD

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	55.0	casing	10.00			INSERT	
55.0	65.0	perforations	10.00			SL. PIPE	
65.0	135.0	open hole	9.50				
135.0	245.0	OPEN HOLE	7.80				

Top of Casing: ft. below ground

PUMPING TEST

Date: 1979 Sep 01
Pumping Rate: 204.9 Imp. gallons/minute
Water level before pumping: 29.0 ft. below ground
Pumping level at end of test: 53.0 ft. below ground
Test duration: 24 hours, minutes
Water temperature: ?? degrees F

REMARKS

WINNIPEG REGION - PREVIOUSLY USED AS A WRB MONITORING STATION FOR WATER QUALITY (1980-1997) & TEMPERATURE (1990-2002). S.W.CORNER OF BUILDING, WATER RIGHTS,ORIGINAL PRODUCTION WELL BECAME RETURN WELL JAN.1988, SPEC.CAP.=8.5IGPM/FT. ON DEC.6/1988 BOREHOLE WAS DEEPENED TO 245FT., DIAMETER=7.8 IN.

LOCATION: RIVER LOT 0007 IN PARISH OF St. Boniface

Well_PID: 38308
Owner: CANADA WIRE & CABLE
Driller: Friesen Drillers Ltd.
Well Name: NORTH RETURN WELL
Well Use: RECHARGE
Water Use:
UTMX: 644848.651
UTMY: 5523150.66
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1979 Sep 01

WELL LOG

From (ft.)	To (ft.)	Log
0	48.0	CLAY; GREY
48.0	53.0	TILL; STONY
53.0	97.9	LIMESTONE; FRACTURED
97.9	99.9	LIMESTONE; RED,CHERTY
99.9	113.9	LIMESTONE; FRACTURED
113.9	179.9	LIMESTONE; HARD
179.9	203.9	LIMESTONE; SOFT,FRACTURED

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	53.8	casing	7.00				
53.8	113.9	open hole	6.20				
113.9	203.9	open hole	5.50				

Top of Casing: ft. below ground

PUMPING TEST

Date: 1979 Sep 01
Pumping Rate: 119.9 Imp. gallons/minute
Water level before pumping: 29.0 ft. below ground

Pumping level at end of test: ?? ft. below ground
Test duration: 6 hours, minutes
Water temperature: ?? degrees F

REMARKS

N.E.CORNER OF BLDG.,NOT USED STANDBY WELL

LOCATION: RIVER LOT 0008 IN PARISH OF St. Boniface

Well_PID: 118133
Owner: MANITOBA HYDRO/WRB
Driller: Perimeter Drilling Ltd.
Well Name: G05OC053 GF #5 MCGILLIVRAY
Well Use: OBSERVATION
Water Use:
UTMX: 631892.464
UTMY: 5522235.681
Accuracy XY: 1 EXACT [<5M] [GPS]
UTMZ: 232.077
Accuracy Z: 1 EXACT <10CM
Date Completed: 2001 Oct 11

WELL LOG

From (ft.)	To (ft.)	Log
0	50.0	CLAY
50.0	56.0	SILT, TILL
56.0	102.0	CARBONATE ROCK

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	92.0	CASING	2.00			INSERT	PVC
92.0	102.0	PERFORATIONS	2.00			SL. PIPE	PVC
92.0	102.0	GRAVEL PACK					SANDPACK
0	92.0	CASING GROUT					

BENTONITE

Top of Casing: 2.0 ft. above ground

No pump test data for this well.

REMARKS

WINNIPEG REGION - CURRENTLY USED AS A WRB MONITORING STATION FOR WATER LEVELS (2002-) & TEMPERATURE (2002-). UNIVERSITY OF MANITOBA RESEARCH - GROUNDWATER TEMPERATURE STATION, HYDRO PROPERTY NORTH OF MCGILLIVARY BLVD.

APPENDIX D

STANDARD OPERATING PROCEDURES

SECTION S200: WAREHOUSE

NO.	TITLE	REV.	DATE	SUPERSEDES REV.	SUPERSEDES DATE
S201	Storage of Chemicals in a Sprinkled Warehouse Procedure Outline NFC Classification System Clearances Within The Warehouse Flammable And Combustible Liquids Dangerous Goods Other Storage Requirements Under The NFC For Dangerous Goods NFC 1995 - Table 4.2.7.5.A	2	June 09	1	Dec 05
S202	Forklift Operating Procedures Purpose Scope Forklift Operations Forklift Traveling Loading Propane Safety Forklift Pre-Shift Inspection Propane Changing	3	June 09	2	Nov 04
S203	Safe Work Permits Purpose Scope	3	Nov 11	2	June 09
S204	Lockout / Tagout Policy Definitions Lockout / Tagout Procedure for Employees Procedure for Contractors	2	June 09	1	Oct 99
S205	Spill Cleanup Purpose Scope General Cleanup Procedures Liquid Spills Handling Procedures Granular Spills Handling Procedures Decontamination Procedures Quantities or Spill Levels for Immediate Reporting 30 Days Reporting	2	June 09	1	Oct 99

All of the Standard Operating Procedures listed on this index dated as noted have been reviewed and approved by management:

_____ Date: _____

Manager

SECTION S200: WAREHOUSE

All of the Standard Operating Procedures listed on this index dated as noted have been reviewed and approved by management:

_____ Date: _____

Manager

S212	Releasing Rainwater/ Runoff from Secondary Containment Inspection of Trailers Inspection of the Secondary Containment Dike Inspection of Secondary Containment Gate Valve Releasing Rainwater/ Runoff Control Valve Opening/Closing Log	1	June 10		

All of the Standard Operating Procedures listed on this index dated as noted have been reviewed and approved by management:

_____ Date: _____

Manager

STORAGE OF CHEMICALS IN A SPRINKLERED WAREHOUSE

- ***This procedure is an interpretation of the National Fire Code Regulations on the storage of chemicals in a warehouse. It is the National Fire Code (NFC) or Provincial Fire Code which dictates how to store product in a chemical warehouse. "The final responsibility for an official interpretation rests with the authority having jurisdiction." (NRC-CNRC Denis Bergeron)***

- Note: In storing in accordance with the NFC the warehouse operator may lose up to 50 points in Section C of the Agrichemical Warehousing Standards Association (AWSA) audit protocols C3, C6 and C7.

- Major differences between AWSA Protocols and the National Fire Code Regulations for the storage of chemicals in the warehouse:

Storage Item	AWSA	National Fire Code*
Segregation of Flammable and Combustible Liquids from: Dangerous goods having a flash point at or above 93.3°C	Flammable and Combustible Liquids must be in their own ISA 2.4m away from these products	Flammable and Combustible Liquids must be separated by NFC Table 3.2.7.6. - may be same ISA.
Segregation of Flammable and Combustible Liquids from: Non regulated products - granular	Flammable and Combustible Liquids must be in their own ISA 2.4m away from these products	Flammable and Combustible Liquids may be stored beside granulars in the same ISA provided the non regulated granulars do not create any dangerous substances when mixed with the liquids or when burnt.
Segregation of Flammable and Combustible Liquids from: Non regulated products - liquids	Flammable and Combustible Liquids must be in their own ISA 2.4m away from these products	Flammable and Combustible Liquids may be stored in the same ISA provided these products are considered a Class I or II commodity under the NFC.

- *Refer to the attached written operating procedure for the complete explanation of how to store in accordance with National Fire Code.

- *The above NFC information was discussed at the recent National Fire Code Council Standing Committee Meeting.*

- Even though the audit protocols do not monitor all of the aspects in the NFC for the storage of product, a warehouse operator must not forget that the National Fire Code or Provincial Fire Code having jurisdiction must be followed.

- Some information in this Standard Operating Procedure has been taken from the National Fire Code of Canada 1995 prepared by the National Research Council of Canada and A Memorandum of Understanding for 1996 Audit Protocols C2, C3, C4, C5, C6 by AWSA.

- The instructions contained in this operating procedure are not intended in any way to abrogate or derogate from requirements contained in industry, municipal, provincial or federal by-laws, regulations or legislation.

PROCEDURE OUTLINE

OBJECTIVE: This procedure is to provide a Warehouse Operator with the basic understanding of the National Fire Code regulations governing the storage of chemicals.

- Maintaining clearances and required aisles in the warehouse
- Sorting Products according to flash points
    - Using an MSDS to determine the National Fire Code class
    - Using an MSDS to determine a Transportation of Dangerous Goods Class
- Flammable and Combustible Liquids
(Liquids that have a flash point below 93.3°C)
    - **NFC Table 4.2.7.5.A** Creating Individual Storage areas and assigning quantity restrictions to each ISA
    - **NFC Table 4.2.7.5.A** Determine total actual load of Flammable and Combustible liquids in a single fire compartment and ensure it does not exceed permitted amounts.
    - **NFC Table 4.2.7.5.A** Stacking NFC liquids to proper height restrictions
    - **NFC Table 3.2.7.6** Verifying that all products are compatible (side by side separation); and to verify that all products are compatible in the entire Fire Compartment.
- Dangerous Goods and Non regulated products
(Products that have a flash point at or above 93.3°C and no flash point at all)
    - **NFC 3.2.7.9.2** Calculating Maximum Area allowed in a warehouse for these products and calculating total area in m^2
    - **NFC Table 3.2.7.5** Stacking these products according to Packing Group and non dangerous goods according to manufacturer's written recommendations.
    - **NFC Table 3.2.7.6** Verifying that all products are compatible (side by side separation); and to verify that all products are compatible in the entire Fire Compartment.
- Other Storage Requirements for Dangerous Goods
    - **NFC 3.2.7.2** Ignition Sources
    - **NFC 3.2.7.3** Ambient Conditions
    - **NFC 3.2.7.4** Housekeeping rules to be followed
    - **NFC 3.2.7.14** Placard types required for building and/or I.S.A
    - **NFC 3.2.7.16** Unauthorized Access

The intent of this Standard Operating Procedure is to ensure a comprehensive understanding of the NFC for the storage of agricultural and commercial labeled products in the warehouse. *This standard*

operating procedure shall be read in conjunction with all other policies and procedures set out the company.

LEGEND

- AWSA Agrichemical Warehousing Standards Association
- ISA Individual Storage Area
- MSDS Material Safety Data Sheet
- NFC National Fire Code
- TDG Transportation of Dangerous Goods

MATERIALS REQUIRED

- To complete this procedure and develop an acceptable chemical layout, the following materials are required:
  - MSDS of all products stored
  - Chemical inventory
  - National Fire Code Tables 3.2.7.1, 3.2.7.6. and 4.2.7.5.A (these tables can also be found in the Warehousing Audit Protocols & User Guide dated October 1996)

NFC CLASSIFICATION SYSTEM

FLAMMABLE LIQUIDS	
Class IA	liquids which shall include those having a flash point below 22.8°C and a boiling point below 37.8°C
Class IB	liquids which shall include those having a flash point below 22.8°C and a boiling point at or above 37.8°C
Class IC	liquids which shall include those having a flash point at or above 22.8°C and below 37.8°C

COMBUSTIBLE LIQUIDS	
Class II	liquids which shall include those having a flash point at or above 37.8°C and below 60°C
Class IIIA	liquids which shall include those having a flash point at or above 60°C and below 93.3°C

Definition: Flash point means the lowest temperature at which a product will give off enough vapour to catch fire if a source of ignition is present. The lower the flash point, the greater the potential fire hazard.

CLEARANCES WITHIN THE WAREHOUSE

Aisles	Minimum Width*
Emergency Equipment (Including fire extinguisher, hoses etc.)	1 m (3'-0")
Exit Doors	1 m (3'-0")
Between ISA (Individual Storage Areas)	2.4 m (8'-0")
Facility over 100 m² (1076 ft²) in floor area - main aisle from front to back of facility	2.4 m (8'-0")
* Minimum Width means clear and free of any obstructions - no product, debris, equipment etc.	

Clearances		Minimum Distances
From Walls:	Dangerous goods - when quantities stored in a building exceed the quantities shown on N.F.C. Table 3.2.7.1.	400 mm (16")
	Dangerous goods stored in a building that do not exceed quantities shown on N.F.C. Table 3.2.7.1	0 mm (0")
	Products that may swell or expand with absorption of water	600 mm (24")
	Pallets only one (1) deep	0 mm (0")
From Ceiling:	Top of storage to underside of floor or roof deck	1 m (3'-0")
From Heating Units:	Top of storage to bottom of heating unit Note: Refer to heating manufacturer's written instructions or the local authority having jurisdiction as they may be more stringent clearances.	1 m (3'-0")

FLAMMABLE AND COMBUSTIBLE LIQUIDS (NFC 1A, 1B, 1C, 11, 111A)

(Liquids that have a flash point **below** 93.3°C)

STEP 1: SORTING PRODUCTS ACCORDING TO FLASH POINT

- Create the following charts on individual pieces of paper for each NFC Class product.
- NFC IA Class products are not normally manufactured as agricultural chemicals. Therefore, by not mentioning this Class in the remainder of this procedure does not mean this class does not apply.

NFC IB			
Product Name	Flash Point	TDG Class	Total Volume (in litres)
		Total	

- Repeat this for NFC IC, II, IIIA and create one with the below title:

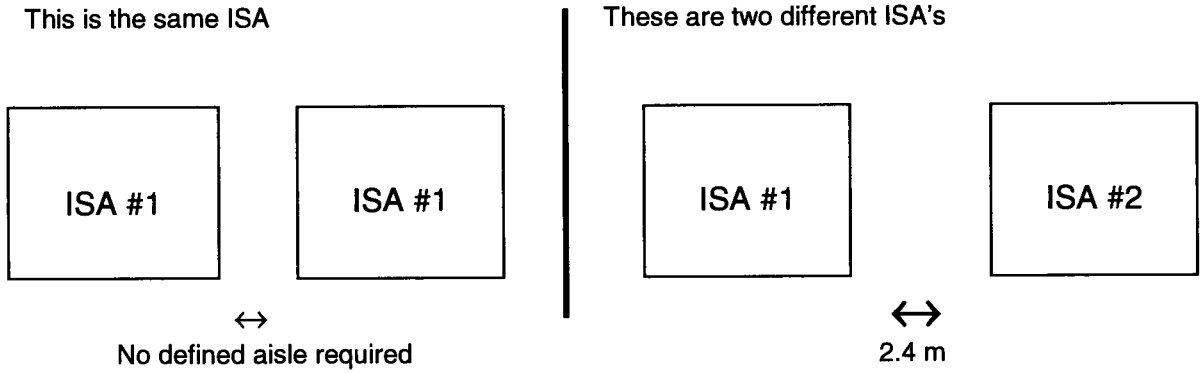
All other products (Dangerous and non regulated) (Flash points at or above 93.3 °C or no flash point at all)			
Product Name	Flash Point	TDG Class	Total Area (m^2)

- Determine the NFC class of each product stored:
- Take an MSDS of a product and verify it is
  - Current (no more than 3 years old) and
  - The correct manufacturer - same as the product stored in warehouse.
- Find the flash point in "°C" for the product in the MSDS, look under the heading "Fire/Explosion Data" or "Fire Fighting Measures".
- Using the NFC Classification System Chart found on page 1 of this procedure, assign the correct NFC class to the product. (If applicable)
  - For example: A flash point from a MSDS is 46°C therefore it is a NFC class II.
  - *Reminder: To distinguish a NFC IB and NFC IC product you must also look at the boiling point found on the MSDS typically under the heading "Physical Properties".*
- Write down the product name and flash point on the corresponding tables previously generated.

- If a product does have a flash point **at or above 93.3°C** or has **no flash point at all**, write this product on the sheet titled **"All other products"**.
- Prior to filing the MSDS for that product, also indicate the TDG class(es) including the Packing Group when applicable. This information can typically be found under the heading "Shipping Information" or "Transporting Information".
- Under the NFC, TDG classes and divisions of dangerous goods shall mean their primary and first subsidiary classification, as defined in Part III of the "Transportation of Dangerous Goods Regulations."
- TDG class 9 dangerous goods shall be stored according to the hazard they present based on their properties of dangerous goods. (Refer to below Step 5)
- Continue the above 5 steps until all of your products have been reviewed.

STEP 2: CREATING AN ISA (INDIVIDUAL STORAGE AREA)

- An ISA is an area designated in the warehouse with a 2.4 m (8'-0") clear aisleway separating it from any other ISA.
- *Reminder: All other clearances still apply, refer to page 2 of this standard operating procedure.*
- An ISA may have subsidiary aisles within it; that is, there may be aisles to exit doors or fire fighting equipment that are not a minimum of 2.4m (8'-0") therefore the same ISA:

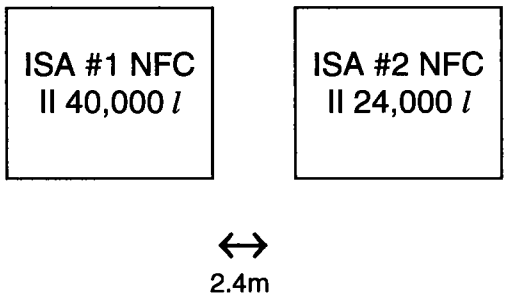


- To create an ISA, understand that there are restrictions as to the maximum allowed volume to be stored in one ISA as well as in one fire compartment.

- Turn to National Fire Code Table 4.2.7.5.A located in the Appendix of this Procedure.
  - On NFC Table 4.2.7.5.A, there are two divisions "Protected Storage" and "Unprotected Storage". Since the warehouse does has a sprinkler system, you will be referring to the 3 columns under the heading "Protected Storage".
  - Look at the column "Maximum Quantity per ISA (*l*)" on NFC Table 4.2.7.5.A. The following information for the maximum permitted amount per ISA for each NFC class is:

Permitted	1A =	10,000
	IC =	20,000 *l*
	II =	40,000 *l*
	IIIA =	60,000 *l*

For example: 64,000 *l* of a NFC Class II products must be separated into 2 ISA's.



Note: Any combination of 24,000 *l*, provided not one ISA exceeds 20,000 *l* - actual permitted

EXAMPLE WAREHOUSE SITUATION

- For the purpose of this standard operating procedure, the following products will be used for the remaining calculations.

Decis	TDG 6.1(3)	P.G. III	NFC IC	3600 *l*
Lontrel 360	Non Regulated		NFC II	712 *l*
Venture L	Non Regulated		NFC II	768 *l*
Eclipse	Non Regulated		NFC II	3738 *l*
Curtail M	Non Regulated		NFC II	9600 *l*
Estatprop	Non Regulated		NFC IIIA	7200 *l*
Pardner	TDG 6.1	P.G. III	NFC IIIA	720 *l*
Horizon BTM	TDG 6.1	P.G. III	NFC IIIA	6000 *l*
MCPA Ester	Non Regulated		NFC IIIA	900 *l*
Ripcord 400 EC	Non Regulated		NFC IIIA	120 *l*

Totals

IC	= 3,600 *l*
II	= 14,818 *l*
IIIA	= 14,940 *l*

- Total the actual amounts of NFC class liquids for the warehouse (only the 4 sheets titled NFC) at bottom of the corresponding sheets.

- To build the ISA's for the products to be stored, we compare the actual to the permitted quantities.

  In the above warehouse:

	Permitted	Actual	
NFC IC	20,000 *l*	3,600 *l*	} These numbers are from above
NFC II	40,000 *l*	14,818 *l*	
NFC IIIA	60,000 *l*	14,940 *l*	

- This comparison indicates that for each class of product, the warehouse is well under the permitted quantities. One ISA for each NFC class in the warehouse can be created; however, this solution is not utilizing valuable warehousing space by creating four (4) different ISA's.

- It is acceptable to place all of the NFC classes in one ISA however:

  - *Where containers for 2 or more liquids having different flash points are stored together in a single individual storage area, the maximum quantity permitted in the individual storage area, the maximum quantity permitted in the individual storage area shall equal that permitted for the liquid with the lowest flash point.*

NFC 4.2.7.5.3

- To generate an ISA, take the class with the lowest flash point and assign the quantity

restriction from NFC Table 4.2.7.5.A to the area you are creating in your warehouse.

- On the warehouse floor plan, draw a box representing an ISA for the flammable and combustible liquids. Determine which product has the lowest flash point in this area and write down the quantity restriction for that ISA.
- Label that area as "ISA #1".
- On a separate piece of paper write down what NFC class(es) will be stored in this ISA totaling the volumes of each NFC class as you add them into this area.

  For example,

  In the above warehouse example, there are products in NFC Class IC (with the lowest flash point) so one ISA to hold the maximum permitted amount of 10,000 *l* - "ISA #1" can be created.

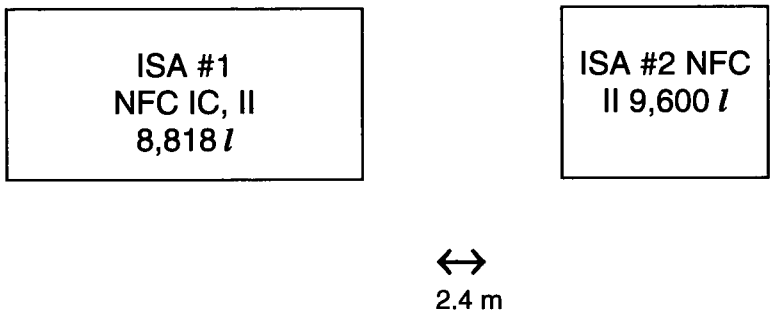
  One scenario for ISA #1 could be as:

  NFC Class IC = 3,600 *l*
  NFC Class II = 5,218, *l*
  8,818 *l*

- The remaining products will form another ISA #2, where NFC Class II in this ISA has the lowest flash point, therefore this ISA can only hold the maximum permitted amount of 40,000 *l*.

  NFC Class II = 9,600 *l*

- Since ISA #1 is at its full capacity the ISA #2 had to be created and an 2.4m (8'-0") clear aisle must be place between these areas.



- Note: Take only the flammable or combustible product volume when reviewing boxed packages that have 2 or 3 different products inside and only one of these products is a flammable or combustible liquid.

STEP 3: MAXIMUM PERMITTED IN A SINGLE FIRE COMPARTMENT

- Now ensure the actual amounts of flammable and combustible liquids stored in the entire warehouse do not exceed the maximum permitted in a single fire compartment. *(For the purposes of this procedure, the entire chemical warehouse is considered one fire compartment since there are no 2 hour fire separations constructed within the warehouse.)*

- The following calculation is used when 2 or more NFC Classes of liquids are stored in a single fire compartment.

  - *Definition: Fire compartment - means an enclosed space in a building that is separated from all other parts of the building by enclosing construction providing a fire separation have a required fire-resistance rating.*

    Calculation:

    The actual quantity per NFC Class is divided by the maximum quantity per NFC class per fire compartment and must be equal or be less than one (1). Their maximum quantity is taken from last column of Table 4.2.7.5.A. of the NFC.

  - Using the example figures indicated earlier:

Class IC		Class II		Class IIIA	
3,600 *l*		**14,818** *l*		14,940 *l*	actual amounts
----------	+	----------	+	----------	=1
60,000 *l*		100,000 *l*		200,000 *l*	permitted

0.06 + 0.15 + 0.07 = 0.28

  - In this example, the warehouse meets the requirement. This warehouse is not overloaded with flammable and combustible liquids.

- If the actual amount of liquid stored is greater than "1", the facility would require some structural renovations or remove some NFC liquids from the warehouse. If structural renovations were the solution chosen by the warehouse operator the warehouse would have to:

  - Construct a 2 hour fire separation to form two fire compartments within the warehouse

Note: The AWSA audit protocols do not monitor the loadings of flammable and combustible liquids in the warehouse, that is Step #3 above. Remember - it is not the AWSA audit protocols that determines how these products are stored, **it is the National Fire Code.**

STEP 4: STORAGE HEIGHTS FOR FLAMMABLE AND COMBUSTIBLE LIQUIDS

- Refer to NFC Table 4.2.7.5.A to the column heading "Maximum Storage Height (m)" and you should find the following information:

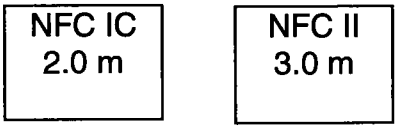
  NFC IC 2.0m
  NFC II 3.0m
  NFC IIIA 6.0m

  Reminder: All other clearances still apply, refer to page 2 of this standard operating procedure.

- Clarification:

  - When 2 products with different flash points (different NFC classes) are stored in the same ISA, it is only the **QUANTITY** of the ISA that is restricted by the product with the lowest flash point and **not** the **HEIGHT**.

  - For example, two different NFC class products on pallets stored side by side;



  - These products are stored in same ISA, therefore the permitted amount would be a total of 20,000 *l* due to the NFC IC.

STEP 5: COMPATIBILITY OF PRODUCTS WITHIN THE WAREHOUSE

- Dangerous goods, including NFC Flammable and Combustible Liquids, are stored in compliance with the NFC separation chart for storage of Dangerous Goods Table 3.2.7.6.

- Where the storage of products coincide with an "**X**", it is **not** permitted to store in the same fire compartment. If however, the volumes of one of the products stored falls under the small quantity exemption found in the NFC Table 3.2.7.1, then it can be deemed **not to be in storage**; however, common sense would dictate separating even small quantities of dangerous goods from incompatible dangerous goods by as much horizontal space as is possible.

- Where the storage of products coincide with an "**A**", they must be separated by a minimum 1 metre horizontal distance. If however, the volumes of one of the products stored falls under the small quantity exemption found in the NFC Table 3.2.7.1, then it can be deemed **not to be in storage**; however, common sense would dictate separating even small quantities of dangerous goods from incompatible dangerous goods by as much horizontal space as is possible.

    - This does not say a 1 metre clear aisle or space - just a minimum 1 metre horizontal distance. Therefore, to maximize warehouse space, this 1 metre horizontal distance could be utilized by the storage of compatible products - those where the storage of products coincide with a "**P**".

- TDG Class 9 products are not listed on the Table 3.2.7.6. Refer to the MSDS for the TDG Class 9 as well as the product to be stored beside it; and review their compatibility to each other.

    - This compatibility usually is found in the section of MSDS titled "Storage Requirements" or "Incompatible Substances"

    - *Reminder: Make sure to review both products' MSDS to ensure they are compatible to each other.*

- **Compatibility of products within each Individual Storage Area:**

  For example,

    - According to the NFC Table 3.2.7.6 a minimum 1 m separation is required between a TDG class 8 and TDG class 6. There are two solutions for the warehouse operator:

    - Solution #1 - Leave a 1m space, thus wasting valuable storage space.

      Or

    - Solution #2 - Increase the space between the two pallets and store a product in this space that is compatible to both.

    - The below pallet arrangement is an acceptable Solution #2:

Pardner
TDG 6.1
NFC IIIA
6.0 m

MCPA Ester
TDG NR
NFC IIIA
6.0 m

Eclipse
TDG 8
NFC II
3.0 m

- **Compatibility within the same Fire Compartment:**
    - *Reactive substances that may react with water shall be stored in sealed containers in a dry location. (NFC 3.1.2.5.3)*
    - Products typically stored that are considered reactive are TDG 4.3 in the agricultural business.
    - *Reactive substances shall be separated from the remainder of the building by a fire separation having a fire resistance rating of not less than 2 hours. (NFC 3.2.7.5.7)*
        - To determine how reactive a substance is, refer to the MSDS of each product and review the properties.
    - The 4.3 products would require a 2 hour fire separation from the remaining products stored in the warehouse.
    - If however, the volumes of one of the products stored falls under the small quantity exemption found in the NFC Table 3.2.7.1, then it can be deemed **not to be in storage** and the 2 hour fire separation requirement is waived; however, common sense would dictate separating even small quantities of dangerous goods from incompatible dangerous goods by as much horizontal space as is possible. As well, separate from TDG class 3 and 8 products by a minimum of 1 m (3'-0")

Reminder: Refer to the MSDS for the potential hazards of the product to determine whether or not a 2 hour fire separation is required; as well, any other hazards the products may have.

DANGEROUS GOODS

- **Excluding flammable and combustible liquids**
- Liquids that have a flash point **at or above** 93.3°C and products with no flash points

STEP 6: DETERMINE TOTAL AREA OF DANGEROUS GOODS IN BUILDING

- Dangerous goods (excluding flammable and combustibles) are stored in compliance with Table 3.2.7.6. The sum of these individual storage areas in the building may not exceed 100m² in unprotected storage.
- It is not permitted to exceed the 100m² area unless a fire suppression system (sprinkler

system) is installed.

- When calculating this area, disregard the space taken up by TDG class 9.2 with no other classification, the non regulated products and the space taken up by the flammable and combustible liquids.

For example, the below warehouse has only the following products;

Frontline TDG NR No NFC 4x4 Pallet	**Edge** TDG NR No NFC 4x4 Pallet	**Dyvel** TDG 9.2 No NFC 4x4 Pallet	4' x 4' = 1.2m x 1.2m pallet = 1.44 m² TDG 6.1 pallets x 1.44 m² = 2.88 m²
Frontline TDG NR No NFC 4x4 Pallet	**Edge** TDG NR No NFC 4x4 Pallet	**Dyvel** TDG 9.2 No NFC 4x4 Pallet	TDG 9.2 Do not add into total area TDG NR Do not add into total area

Therefore this Building only has 2.88 m² of Dangerous Goods - well below the 100 m² allowed for an unprotected building.

STEP 7: STORAGE HEIGHTS (excluding flammable and combustibles)

- Storage heights of dangerous goods excluding flammable and combustible liquids shall conform to NFC standards. This deals only with dangerous goods that are not classified as NFC flammable and combustible liquids (those products with a flash point below 93.3°C).

- NFC Article 3.2.7.5 states the method of storage of these dangerous goods shall be determined to ensure stability of the stored products and not to exceed the maximum heights of storage as follows:

TDG Classification	No Sprinkler	Sprinkler	In-rack Sprinkler
Packing Group I	1.8 m	2.4 m	unlimited
Packing Group II	2.4 m	4.0 m	unlimited
Packing Group III	4.5 m	6.0 m	unlimited

  - Refer to the MSDS or manufacturer of a Class 9 and Non-regulated product for the height restrictions.

  - Stacking heights of products must not be breached by piling a product with a lesser requirement on top of one with a more stringent requirement.

    For example:

    A pallet of TDG class 6.1, P.G. II can not be stacked on top of a pallet of TDG class 6.1, P.G.I.

- NFC Article 3.2.7.5.4 states all dangerous goods, except TDG class 2 gases, shall be stored not less than 100 mm (4 inches) above the floor. In other words, these products cannot be stored on the floor, but on pallets or racks above the floor.

STEP 8: NON-REGULATED PRODUCTS (excluding flammable and combustibles)

- Non-regulated granular products may be stored in the same ISA as flammable and combustible liquids provided these granular products do not create any dangerous substances when mixed with the liquids or when burnt.

- Non-regulated liquid products may be stored in the same ISA as flammable and combustible liquids provided these products are considered a Class I or Class II Commodity under the NFC.

- Storage heights of non-regulated products are as per MSDS or manufacturer's recommendations.

STEP 9: THE CHEMICAL LAYOUT

- Draw the pallets on the floor plan of the warehouse.
- Draw main aisle way 1m or 2.4m.
- Designate the individual storage area(s) for flammable and combustible liquids based on the maximum permitted amounts in one ISA; and indicate those volume restrictions on the floor plan - step 2 of this procedure.
    - Calculate the total load of the flammable and combustible liquids for the entire warehouse - step 3 of this procedure.
- Indicate all clearances and aisles as indicated on page 4 of the procedure; and indicate the 2.4m (8'-0") aisles between ISA's if applicable.
- Pallet by pallet indicate the product's NFC class, TDG class and stacking height. As new products are added make sure the compatibility of each product is verified - Table 3.2.7.6.
- Calculated the total floor area for dangerous goods to ensure it is under 100m² - step 6 of this procedure.
- Post the completed floor plan in the shipping office.

OTHER STORAGE REQUIREMENTS UNDER THE NFC FOR DANGEROUS GOODS

- IGNITION SOURCES NFC 3.2.7.2
  - Heating appliances shall not be permitted in a fire compartment used for the storage of TDG Class 2.1, 3, 4 or 5 products unless the heating appliances are installed in a manner that will not create a fire or explosion hazard.
  - Smoking is not permitted within a fire compartment used for the storage of dangerous goods. No smoking signs shall be posted.
- AMBIENT CONDITIONS NFC 3.2.7.3
  - Rooms or parts of buildings used for the storage of dangerous goods shall be dry and cool.
  - Where products being stored are capable of releasing flammable vapours or toxic gases under normal ambient conditions, the building will be designed with a ventilation system in accordance with NFC.
- HOUSEKEEPING NFC 3.2.7.4
  - Storage areas must be kept free of waste, packaging materials, debris and any spilled product.
  - Broken packages or containers must be repackaged and labeled as soon as possible.
- PLACARDS NFC 3.2.7.14
  - Placards are as defined by the TDG regulations: large diamond shaped safety marks of at least 250 mm (10") each side, used on a vehicle or large container to indicate the type of dangerous goods.
  - All ISA's must be clearly marked with the appropriate TDG placards where Dangerous Goods are stored.
  - One or more placards at the entrance door into a room used for storage of dangerous goods are required to inform fire fighters that dangerous goods are contained within.
  - In larger storage areas containing a variety of dangerous good in different ISA each ISA should have placards. This requirement should be confirmed with the local authority having jurisdiction.
  - Where a single product is stored in an ISA only the Product Identification Number (PIN) UN or NA four digit number needs to be posted;

For example,

ISA - Combustible liquid NFC IIIA 6.1 P.G. III Only Buctril M	T o

To be posted

UN2902

- Where multiple products are stored in an ISA with the same TDG class and division, the TDG corresponding placard shall be posted;

  For example,

ISA - Combustible liquid NFC IIIA 6.1 P.G. III Buctril M and Liberty

6.1 P.G. III Placard to be posted

- UNAUTHORIZED ACCESS
  - An area or building used for the storage of dangerous goods shall be secured against unauthorized access.
- UNPROTECTED RACKING
  - If a warehouse has racking that does not have a fire suppression system built in, all of the requirements for storage heights, segregation of products - everything found in this standard operating procedure applies in the same way that products are on pallets and stacked - there are no exemptions or special situations for unprotected racking.

National Fire Code 1995 – Table 4.2.7.5.A

Table 4.2.7.5.A.
Indoor Container Storage (Palletized or Solid Piled Storage and Unprotected Rack Storage)
Forming Part of Sentences 4.2.7.5.(1) and (4), 4.2.8.4.(3) and 4.2.9.1.(3)

Class of Liquid	Storage Level	Protected Storage[1]			Unprotected Storage		
		Maximum Quantity per I.S.A.[2], L	Maximum Storage Height, m	Maximum Quantity per *Fire Compartment*, L	Maximum Quantity per I.S.A.[2], L	Maximum Storage Height, m	Maximum Quantity per *Fire Compartment*, L
Class IA	*First storey*	10 000	1.5	50 000	2 500	1.5	2 500
	Storeys above the *first storey*	7 500	1.5	30 000	2 500	1.5	2 500
	Basement	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted
Class IB or IC	*First storey*	20 000	2.0	60 000	10 000	1.5	10 000
	Storeys above the *first storey*	10 000	2.0	50 000	10 000	1.5	10 000
	Basement	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted
Class II	*First storey* and *storeys* above the *first storey*	40 000	3.0	100 000	15 000	3.0	30 000
	Basement	25 000	1.5	25 000	Not Permitted	Not Permitted	Not Permitted
Class IIIA	*First storey* and *storeys* above the *first storey*	60 000	6.0	200 000	50 000	4.5	100 000
	Basement	40 000	3.0	100 000	Not Permitted	Not Permitted	Not Permitted

FORKLIFT OPERATING PROCEDURES

PURPOSE

- This procedure is designed to provide the required information for safe and efficient procedures on the use of forklifts.

SCOPE

- These operating parameters are intended to cover the use and inspection of forklifts in a warehouse.

FORKLIFT OPERATIONS

- Only an approved forklift shall be used.
- Unauthorized and untrained personnel shall not be permitted to operate material handling equipment.
- No person shall be allowed to stand or pass under the elevated forks or attachments of any forklift, whether loaded or empty.
- When a forklift is left unattended the load engaging means shall be fully lowered, controls shall be neutralized, power shall be shut off and brakes set. Forklifts shall not be left unattended on an incline.
- The forklift shall be inspected daily prior to use.
  - Refer to Pre-shift Inspection Form and instruction on proper procedure.
  - Report all defects to the Supervisor immediately.
- A forklift is defined as unattended
  - when the operator is 25 ft. or more away from the vehicle which remains in his view
  - whenever the operator leaves the vehicle and it is not in his view.
- When the operator of the forklift is dismounted and within 25ft. of the forklift still in view, the load engaging means shall be fully lowered, controls neutralized and the brake set to prevent movement.
- Prior to entering the trailer, the forklift operator must ensure that the trailer wheels are chocked manually or by ensuring the light is orange on the indicator panel prior to loading and unloading the trailer. The orange light means the wheel chocks are in position and the dock plates can be put into place.
- Ensure driver has lowered dolly legs when the trailer is not coupled to a tractor prior to loading or unloading.
- Inspect the floors trucks and trailers for any holes and weakness before they are driven into.
- Personnel lifting shall only be done in an approved safety platform secured to the lifting carriage and / or forks.
- Forklift shall not block fire exits, main aisles or fire equipment at any time.

FORKLIFT TRAVELING

- Forklifts shall not be driven up to anyone standing in front of any fixed object.
- Operators shall ensure that no passengers ride on the forklift.
- Keep legs and feet inside the confines or guards of the forklift. Operator must never place any part of the body between the mast and the lift mechanism.
- Operators must look around **before** starting to move.
- Other trucks traveling in the same direction at intersections, blind spots or other dangerous locations shall not be passed.
- The forklift operator is required to slow down and sound the horn at cross aisles, corners and other locations where vision is obstructed.
- The driver shall be required to look in the direction of, and keep clear view of the path of travel.
- The operator will travel in reverse if the load being carried obstructs forward view.
- Grades shall be ascended or descended slowly.
- When ascending or descending grades in excess of 10 percent loaded trucks shall be driven with the load upgrade.
- On grades the load and load engaging means shall be titled back and raised only as far as necessary to clear the road surface.
- Always travel with forks as low as possible, whenever the forklift is loaded or unloaded. Forks should clear the floor by about 4" (10cm.)
- Pedestrians will always have the right of way.
- Under all traveling conditions the forklift shall be operated at the speed that will permit it to be brought to stop in a safe manner.
- Stunt driving and horseplay shall not be permitted.
- The operator is required to slow down for wet and slippery floors and not cross the wet area.
- Dock plates shall be properly secured before they are driven over. The dock plates shall be driven over carefully and slowly and the dock plates rated capacity never exceeded.
- Running over loose objects or debris on the roadway surface shall be prohibited. Pick up any debris or loose objects when spotted.
- Watch the rear end swing of the forklift when turning corners.
- While negotiating turns, reduce speed to a safe level. Turn the steering wheel in a smooth, sweeping motion. Except when maneuvering at a very low speed, the steering wheel shall be turned at a moderate even rate.

LOADING

- Only stable or safely arranged loads shall be handled. Caution shall be exercised when handing offcentre loads, which cannot be centred.
- Only loads within the stated capacity of the forklift shall be handled.
- Forklift equipment with attachments shall be operated as partially loaded trucks when not handling a load.
- The forks shall be placed under the load as far as possible and the mast shall be titled backward to stabilize the load.
- Extreme care shall be used when tilting the load forward and backward. When stacking or tiering, only enough backward tilt to stabilize the load shall be used.
- If at any time a forklift is found to be in need of repair, defective or in any way unsafe the forklift shall be taken out of service and tagged out, until it has been restored to safe operating condition.

PROPANE SAFETY

- Always wear safety glasses and gloves when changing a propane tank.
- When changing a cylinder you must let the engine run while the valve of the cylinder is turned off. This reduces the pressures in the line. If you do not do this, propane may be released when loosening the coupling causing a serious freezer burn.
- Smoking allowed in designed areas only. Smoking beside the propane storage area is strictly prohibited.
- Ensure the pressures relief valve points up when operating the forklift.
- Use your eyes, nose and ears to inspect for leaks.
- Propane is a tank is under pressure. Treat it with respect.

FORKLIFT PRE-SHIFT INSPECTION

Note: Any defect detected during the inspection must be recorded on the checklist and reported to the supervisor prior to use.

- Warehouse staff must complete a pre-shift inspection of the forklift following the checklist provided.

OVERHEAD GUARD AND LOAD BACKREST EXTENSION

- Inspect and record the condition of the overhead guard and load backrest extension.
- Check for loose or missing parts or fasteners. Damage to these parts can weaken the guard or backrest.

OPERATOR RESTRAINTS (Seat Belt)

- Check operator restraints for proper condition or cuts and tears.

WARNING DEVICES

- Test all audible and visual warning devices on your equipment. Be sure every device is working at all times.

FORKS AND FORK RETENTION

- Inspect forks for cracks, heel wear, tip wear and tip alignment.
- If forks are worn beyond limits, they must be replaced.
- Stop devices are mounted at the top ends of the forks. These along with the load backrest extension, prevent the forks from sliding off the end. If the fork stop devices are removed, worn, or broken, they must be repaired or replaced.

TIRES

- Since there is no suspension on a lift truck, tire condition is very important.
- All tires must be inspected for cuts, breaks, and signs of wear.
- Material may become embedded in solid tires. This material must be removed.

TRUCK FLUIDS

- Engine oil levels should be maintained between the "add" and "full" marks. The best time to check is before starting the engine before the shift. The oil should be allowed to drain into the crankcase for the most accurate measure.
- Check for obvious damage or leaks in the hydraulic system, engine and transmission oils, fuel, engine coolant, power steering and batteries.

BRAKES

- Service brake pedal should feel firm when pressed. There should be no noticeable drift (falling) on the pedal with pressure applied for ten seconds. The same tests apply for inching brake pedals.
- If a significant increase in pressure on the pedal is required to stop the truck, report the condition to your supervisor.
- Check parking brake performance by moving the lever from full forward to full back position. Maximum force should be required just before the full back (brake on) position.
- The parking brake should hold the truck with a capacity load on a 15% grade (1.5 feet of vertical rise over 10 feet) or the maximum grade the truck will encounter in operations.
- If performance checks are not satisfactory, report the condition to the supervisor.

HYDRAULICS

- Check hydraulic functions with the engine running.
- All movements of upright and carriage should be smooth with no binding up or down.
- Check full forward and back tilt for smooth operation.
- Raise the carriage to its maximum height. If the carriage will not reach its full upper limits, this indicates a low hydraulic fluid level.
- Report any unusual jerky, or sluggish operating conditions to the supervisor.

BATTERIES

- Check battery for any leaks or buildup of deposits. If any are found, have the battery serviced immediately because these conditions mean that sulfuric acid is escaping from the battery cells. The acid will damage the battery and the truck.
- Check connections from the battery to the truck. On ignition batteries, make sure the connector cables are in good shape and are attached to the battery posts snugly. Connectors and post should be free of corrosion and / or acid buildup.

PROPANE CHANGING

HERE ARE THE PROCEDURES FOR INSTALLING A HORIZONTAL TYPE LPG TANK:

- No smoking is allowed when installing a LPG tank.
- Shut off the truck engine by closing the tank`s service valve and waiting for the engine to run out of fuel. Set controls to neutral, lower the forks, set the parking brake, and turn the ignition to off.
- With the service valve closed, wearing proper protective equipment (safety glasses and insulated rubber gloves supplied), unscrew the line connection and move the hose out of the way. Carefully remove the tank from the mounting bracket.
- Select a replacement tank. Note its condition. Does it leak? Is it dented? If unusual conditions are apparent, tag the tank with the proper information so it can be repaired. If the tank is ok, make sure to check that the service valve is completely closed before mounting the tank on the truck.
- Propane Service Company inspects all CWS Logistics Ltd. LPG tanks.
- Do not roll or drag the tank. This is flammable fuel in a pressurized tank.
- Carefully position the tank in the mounting bracket. Line up the pin on the mounting bracket with the hole in the tank collar. This position is important for the pressure relief valve angle so that the maximum amount of fuel can be consumed.
- Check all rubber seals in the tank and fuel line connection. If any of the seals are broken or damaged, do not connect the tank to the truck. Notify the supervisor for maintenance.

- Connect the fuel line until tight. There should be about 1/8" clearance between the two fittings if properly tightened.
- Empty LPG tanks should be placed in the outside storage cage upside down to indicate to the service company that the tank is empty.

WARNING

WHENEVER YOU DETECT A FUEL LEAK:

- Shut off the service valve.
- Take the truck out of service.
- Report the problem to the supervisor or maintenance personnel.
- Safety glasses and insulated rubber gloves are to be worn.
- Check rubber seals in connections to make sure they are there and in good condition.
- Re-screw the fuel line connections until tight. There should be about 1/8" clearance between the two fittings if properly tightened.
- Slowly turn on the service valve one full turn only. Opening the valve quickly may shut off the fuel supply to engine (the maximum withdrawal valve may react). Reopen it with one turn only.
- The service valve should be opened no more then one full turn to provide fuel supply to the engine and still be able to be shut off quickly.
- If you hear or smell leaks, do not try to start the truck. Take the truck out of service and report the problem to the supervisor.

If no leaks are detected, start the engine.

SAFE WORK PERMITS

PURPOSE

- Safe work permits are used to ensure the safety of people when performing hazardous jobs. These people could be employees or outside contractors. Hazardous jobs include HOT WORK, VESSEL or CONFINED SPACE ENTRY, and HOT ELECTRICAL WORK.

SCOPE

- These operating parameters are intended to cover the procedure to obtain a Safe Work Permit for Hot Work, Vessel or Confined Space Entry, and Hot Electrical Work.
- These operating procedures shall be read in conjunction with Standard Operating Procedures for lockout / tagouts.
- A "Hot Work" permit is issued for work where there is a possible source of ignition from the work being done. Welding, cutting, grinding, or electrical sparks. The Hot Work permit must be strictly limited to the area or confines specific on the permit. A Hot Work permit is always required for the use of non-classified electrical equipment in an electrical classified area division I and II.
- "Confined Space Entry" permit is required when entering any tank, tank car, tower and sewer, pit trench, excavation or other confined space. A separate procedure for this type of work known as the "Confined Space Entry" procedures is outlined in the Provincial Occupational Health and Safety Regulations and in the Canada Occupational Health and Safety Regulations.
- "Hot Electrical Work" permit is issued for work on exposed live electrical components where contact with voltage is possible.
- Work permits are not required for the following:
    - An operator who is setting up, cleaning, or making operating adjustments to equipment considered being within the normal course of duties and for which there are written procedures.
    - Minor adjustments to a piece of equipment, obtaining name plate data, or examining an opened, non electrical unit from the outside by a maintenance person in the presence of operator during the planned operations of the equipment. This would not include a shut down for which maintenance person must make their presence known to the operation personnel and wear the appropriate protective equipment.
    - Changing light bulbs and fluorescent tubes.
- The safe work permit and hot work permit are located on the "I drive":
    - (I:)/FORMS/safeworkpermit – hot work permit

LOCKOUT / TAG OUT

POLICY

- The following procedures will enable an employee to work safely around hazardous energy sources.
- It is up to the employee to guard his/her own life and health by adhering to the procedures and rules.
- If the maintenance procedure is routine in nature and is done by the same personnel, it should not be considered as requiring a permit.
- The manager must confirm in writing that the maintenance procedure is routine.
- However, it is mandatory to implement the lockout / tagout procedures when working on equipment with moving parts such as motors, pumps, blowers etc.

"LOCKOUT"

- Means before any maintenance, repair, test or adjustment to any tool or machinery, the energy source must be disengaged to ensure that it cannot be accidentally or unintentionally started up while employees are working on that piece of equipment.

"TAGOUT"

- Means the energy-isolating device is placed in the safe position and a written warning is attached to it.

PROCEDURE FOR EMPLOYEES

- Complete the Lockout / Tagout Training manual.
- Complete the examination.
- Management will advise the employee if he/she is qualified to complete a lockout / tagout procedure.
- Follow the checklists for lockout and tagout procedures.

PROCEDURE FOR CONTRACTORS

- If a Contractor has their own Lockout / Tagout procedures it is the responsibility of the Manager to review these written procedures.

- If the Manager accepts these written procedures as an alternate the Contractor may proceed.

Reminder: It is still the Manager's responsibility to notify the employees and conduct a head count.

- A Safe Work Permit must be completed and a copy of the Contractor's written Lockout / Tagout procedures shall be attached to that Safe Work Permit.

Or

- If the review of the Contractor's written procedures are not acceptable, it is the responsibility of the Manager to train the Contractor and implement the company's written Lockout / Tagout procedures.

SPILL CLEAN UP

PURPOSE

- This procedure is designed to provide the required information for safe and efficient procedures on small and large scale spills.

SCOPE

- These operating parameters are intended to cover the spill cleanup and decontamination of the area for liquid and dry materials for small and large scale spills.

GENERAL CLEANUP PROCEDURES

- Segregate and remove from the spill area those containers, which are clean and undamaged.
- Every effort shall be made to contain the liquid on spill site and from entering storm drains, well water system, and navigable waterways.
- Contact product manufacturer for advice or assistance with the specific products.
- The below procedures shall be used in the event that damage occurs to a container resulting in a spill.

LIQUID SPILLS HANDLING PROCEDURES

- Consult the Material Safety Data Sheets for the product(s) involved to get the specific spill or leaks clean - up, decontamination procedures, properties of product, and the proper protective equipment.
- Keep bystanders away from the accident by sealing off the area where the spill has occurred. Only those personnel involved in the clean up may be allowed to enter the area.
- Do not smoke, drink or eat during the clean up operation.
- Prevent further leakage by repositioning the container, and stopping the leak. Place container inside the over pack bag and then in the over pack drum. The container shall be placed inside the drum so there is no leakage. If a pail is leaking from a side seam roll it into a position where the seam faces upward.
- Using absorbent material from the spill kit, form a dam around the spill to prevent further spreading.
- Spread absorbent over the spill in sufficient quantity to soak up liquid. (Do not use sawdust, as it is a combustible material.)
- Sweep the area and place the wet absorbent into a separate spill bag.
- While sweeping avoid brisk movements to keep the material from becoming airborne. Always sweep towards the middle of the spill using pushing motion with broom, not a pulling motion.
- Sweep the spill area and put the waste into a plastic spill bag.

- Repeat the absorbent and sweeping until all liquid is cleaned up.
- Clean any spill from the outside of the contaminated container by using decontamination procedures indicated later in this policy.
- All over pack spill bags and drums shall be labeled in accordance with TDG and WHMIS regulations.
- Place the sealed drums in a previously designated area of the warehouse for future disposal.
- Replenish materials used from spill kit immediately.
- Inform facility manager of PPE needing to be replaced.

GRANULAR SPILLS HANDLING PROCEDURES

- Consult the Material Safety Data Sheet (MSDS) for the product (s) involved to get the specified spill or leak clean up, decontamination procedures, properties of product, and proper protective equipment information.
- Keep bystanders away from the accident be sealing off the area where the spill has occurred. Only those persons involved in the clean up may be allowed to enter the area.
- Do not smoke, drink, or eat during the clean up operation.
- Damaged containers of dry material and spilled material shall be immediately placed in clear heavy-duty plastic bags and then placed in spill drums or other suitable containers.
- Dampen granular somewhat to keep the dust down. Refer to MSDS to ensure water can be used.
- Sweep the area and place the dampened material into a plastic bag.
- While sweeping avoid brisk movements to keep the material from becoming airborne. Always sweep towards the middle of spill by pushing the broom not pulling the broom.
- Sweep the spill area and put the waste into a plastic spill bag or drum.
- Clean any spill from the outside of the contaminated containers by using decontaminated procedures below.
- All over pack spill bags and drums shall be labeled in accordance with WHMIS and TDG when applicable.
- Place the sealed drums in a previously designated area of the warehouse for future disposal.
- Replenish materials used from spill kit immediately.
- Inform facility manager of PPE needing to be replaced.

DECONTAMINATION PROCEDURES

- Consult the Material Safety Data Sheets for the product(s) involved to get the specific decontamination procedure.
- After most of the dry or liquid chemicals are transferred into the drums, soak the contaminated area with a strong solution of a heavy-duty detergent, or alternatively, dampen the area down and spread hydrated lime over the entire area.
- Allow from 1 to 3 hours for decontamination agents to act before proceeding further.
- After the waiting period, absorb any liquids with an appropriate absorbent material. Sweep and shovel all remaining material into drums.
- While sweeping avoid brisk movements to keep the material from becoming airborne.
- Repeat the application. Consult the manufacturer of the product to verify if other agents such as bleach may be used.
- After having completed the above, the spill area may be able to be washed down with water subject to Provincial Ministry of Environment approval.
- Contact the Manager once the spill cleanup is complete and the product is ready for proper disposal.
- All workers shall take a shower and change to clean clothing. Do so earlier if clothing becomes contaminated, even if the cleanup is not yet completed.
- Place all clothing, boots, gloves, and tools in plastic bags until decontaminated. Wear rubber gloves while handling items being decontaminated.
- If any person involved in the accident or cleanup should feel ill he/she should inform his/her supervisor and be taken promptly to the hospital with a copy of MSDS.
- The manufacturer of the product will be able to provide you with more detailed information and assistance in cleaning up the spill and disposal of the product.

QUANITIES OR SPILL LEVELS FOR IMMEDIDATE REPORTING

- A person who is in charge, management or control of dangerous goods at the time he / she discovers or is advised of a dangerous occurrence in respect to those goods shall immediately notify:
    - The immediate Supervisor or Manager.
    - Canutec (613) 996-6666 (COLLECT)
    - The local police or the appropriate authority of the province in which the goods are located by calling the applicable emergency authority at the following number:

SASKATCHEWAN	800- 677-7525
CALGARY	800-332-1414
EDMONTON	800-222-6514

    - Owner of transport unit if other quantities or levels for immediate reporting.

30 DAYS REPORTING

- The employer of the person who has control of dangerous goods at the time of:
    - The discovery of a dangerous occurrence relating to those goods;
    - An accident in which there is a release of the Dangerous Goods and a person is killed or injured so seriously as to require hospitalization;
    - The discovery of damage to the integrity of any pressurized means of containment of dangerous goods;
    - The suspicion that the container that contains the Dangerous Goods has suffered damaged to its integrity resulting from impact stress or fatigue;

Shall within 30 days of that time notify, in writing, the Director of the Transport Dangerous Goods Directorate.

STORING / RECEIVING / DISPOSING DAMAGED GOODS

PURPOSE

- To set out the procedures for emergency preparedness, safe and proper handling of agricultural chemicals in the workplace so as to avoid injury or illness to the employees and protect company property, the community and the environment.

SCOPE

- To comply with Federal and Provincial Safety and Health Legislation, all employees must be trained in the safe handling and storage of hazardous chemicals in the workplace and the steps to take in case of leaks, spills or fires.

- In addition to the Legislation, CWS must also comply with the Agricultural Warehousing Standards Association (AWSA) warehousing standards in order to receive a certificate number for each site; the manufactures will not allow CWS to stock and sell their products.

STORING / RECEIVING DAMAGED GOODS

- When products are delivered to the warehouse and upon inspection of the load, it is found that products are damaged and/or contamination has occurred on the delivery vehicle, the following procedure will be implemented.

Outside Carriers:

- The truck driver will be advised of the damage and/or contamination.

- The truck driver will be instructed to contact the dispatcher to advise the trucking company of the nature of the incident and what actions the locations will be taking.

- Both the truck driver of the delivering load and the warehouse worker must make notation of the damages on the bill of lading and both parties will sign the bill of lading.

- Pictures depicting the damages must be taken and a CWS damage report must be completed.

- If the product that is damaged is regulated under Transportation of Dangerous Goods the warehouse supervisor will advise the chemical manufacturer and Transport Canada (CANUTEC) of the incident and how the location will clean up and decontaminate.

- The warehouse staff will clean up and decontaminate as to the procedures.

- The clean up materials/contaminated products will be contained in the appropriate container/over pack drum, appropriately labeled as to its contents and arrangements made with a licensed waste disposal firm to dispose of the contents.

- The truck will be allowed to leave the facility only after clean up/ decontamination, regardless of who owns the products.

- The product will be recorded on the receiving report as damaged and faxed to the customer.
- The pictures will be emailed to the customer.

CWS Logistics:

- If the damaged goods arrive on a CWS truck, a damage report must be completed and pictures must be taken.
- The product is recorded on the receiving report as damaged.
- The pictures and damage report will be emailed/faxed to the customer to notify them of the damages.

STORING DAMAGED/CONTAMINATED PRODUCTS

- Once the damaged product is discovered, CWS will document the damage as outlined in Policy S032 – Damaged Goods Procedure.
- Liquid products will be decanted into a new jug following the MSDS guidelines and ensuring proper safety equipment is worn.
- Ensure the jug is labeled with a workplace label filling out the required information as per WHMIS training including how many litres are in the container.
- For granular product or seed, try to contain the rip or tear in the bag with tape.
- Consult MSDS for safe handling requirements and ensure proper safety equipment is worn.
- Place damaged bag in spill bag and seal with duct tape.
- Label bags with workplace label referencing MSDS for safe handling procedures.
- The damage report should then be given to the Facility Manager for authorization.

DISPOSING OF DAMAGED GOODS

- CWS Logistics Ltd. secures the entire damaged product and cleanup materials in barrels and store it on site.
- The customers will be responsible to dispose of their own product.
- If CWS creates damages that require disposal, a third party will be contracted to dispose of the goods.

SPILL INCIDENT REPORTING

RECEIVING DAMAGED PRODUCT FROM TRANSPORT UNIT

- When receiving product, warehouse personnel must inspect product for damage while unloading.
- Inspection must include any type of damage.
    - Damaged boxes, dented jugs or torn bags.
    - Leaking boxes, wet bags.
    - Soaked boxes, shifted pallet.
    - Seed bags with no tags.
- If any damaged product is found it must be set aside and put into a proper location. A CWS Damage Report must be filled out by the person unloading the product. The product must be classified as damaged on the receiving report.
- **When filling out the report, the following needs to be identified:**
    - Reported by; reported to; date; time; and location of incident.
    - How the incident occurred
    - Carrier
    - Bill of Lading Number and number of units damaged.
    - Product involved; lot number.
    - Personal Protective Equipment; clean up equipment.
    - Estimated loss of product.
    - Pictures taken of damaged product.
- The damaged product needs to be identified by Bill of Lading Number, so that it is not duplicated as floor movement damaged at a later date.

FLOOR MOVEMENT DAMAGE

Spill / Damaged Incident report

- A CWS Damage Report must be filled out whenever floor movement causes any damage.
- Floor movement means movement of product at CWS Logistics Ltd. after it has been received and put into storage. This can occur whenever product is being moved in the warehouse.
    - Forklift damage
    - Reorganizing
    - Product not stacked properly
    - Shipping

* If this occurs a CWS Damage Report has to be filled out by the warehouse personnel that is involved with the floor movement damage.

* **When filling out the report the following needs to be identified.**
    - Reported by; reported to:
    - Date: time; location of incident:
    - During storage; handling (floor movement)
    - Product involved; number of units; lot number.
    - What protective equipment and spill clean up equipment was used.
    - Estimated loss of product.

* A corresponding number needs to be written on the CWS Damage Report form, and the customer must be notified of the change in inventory.

- Pictures of Damaged product should be taken and forwarded to the customer if applicable.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

PURPOSE:

- To outline to all employees safety equipment that must be on hand and used in order to perform their responsibilities in a safe and efficient manner.

SCOPE:

- All employees should ensure that appropriate personal protective equipment, meets the standard as approved by Labour Canada, is available in good condition and used wherever required.

SELECTION ON PPE

- PPE will be used to minimize or eliminate the exposure or contact to physical and chemical injury.

- Certain PPE is mandatory for particular job procedures and all employees are expected to follow established corporate policy and procedures. In other situations management along with the safety committees and worker reps will assess the need for PPE as work tasks and hazards dictate. Refer to Personal Protective Requirements for current corporate policies.

- PPE shall be selected on compatibility of the PPE with the user. Selection shall be based upon:
    - degree of hazard to be protected against
    - other PPE that must be worn
    - unique tool or equipment requirements
    - any other environmental factors affecting the use of the PPE
    - specific user needs related to PPE design

- Without the proper consideration of these issues, employee input and PPE program, risks to our employees can be significantly greater due to several reasons:
    - failure to use PPE
    - improper wearing of PPE
    - ineffective functioning of the PPE

- Material Safety Data Sheets and OHS programs and policies shall be referred to determine the proper type of PPE for a special task.

- Protective equipment is kept in designated areas in the warehouse:
    - rubber boots
    - rubber gloves
    - tyvek suit (pants and jacket)
    - safety goggles
    - respirator with 2 filters
    - Disposable coveralls and boot covers

- Other personal protective equipment located throughout the warehouse:

    - Fire extinguishers (instruction location in Fire Protection Equipment)

  - Eyewash station/ Shower station
  - Emergency exit lights
  - Face shields

- Each employee is responsible for the care and cleaning of emergency equipment and for notifying of any items that require replacing.

- This equipment is to be used as outlined by corporate polices or in the event of an emergency.

- All employees are to be trained in the use and care of equipment and when emergency is required.

- An inventory list of the equipment is kept in the warehouse storage locations. Employees fitted to specific PPE are responsible for completing monthly checks of equipment to ensure equipment is in working order.

- Every six months, these employees are responsible for completing a thorough check of the PPE to ensure equipment is complete and is not expired.

- Each employee is required to sign for the equipment and ensure they have each item on the list. The inventory lists covers a period of six months.

- Any equipment that is used must be thoroughly cleaned before it is put back in its proper place.

- Protective equipment shall include personal protective equipment for eyes, face, head and extremities, protective clothing, respirator devices and protective shields. This equipment shall be provided to staff as required. It will be maintained in a sanitary and designated storage area.

EMERGENCY EQUIPMENT INVENTORY LIST

- The following are procedures for the care and use of emergency equipment:

  - An inventory list of all the emergency equipment is posted at the cabinet in the warehouse where the emergency equipment is kept.

  - The equipment will be inspected monthly against the inventory and to ensure all equipment is serviceable.

  - The employee working in the warehouse will be trained on the use of the emergency equipment prior to spring season. (Record the training).

EMERGENCY LIGHTING

- The following are procedures for the care and use of the emergency lighting.
    - **The emergency lights are all on separate power feeds and must be checked monthly. In order to inspect the power supply, it must be unplugged or the Test Button pressed to test the lighting. If any lights do not turn on when in test mode or the power supply is cut, maintenance must be notified.**
    - The emergency lighting locations are included on the site plan.
    - The emergency lighting will be checked on a monthly basis to ensure it performs upon failing of the primary power supply.
    - On a yearly basis the unit will provide emergency lighting for duration equal to the design specifications under simulated power failure conditions.

FIRE EXTINGUISHERS

Maintenance

- The following are procedures for the care and use of portable fire extinguishers.
- Portable fire extinguishers are located at each emergency exit, on each forklift truck and at intervals as designated by the National Fire Code.
- Fire extinguisher are checked monthly for the following:
    - Fully charged
    - Fire extinguishers pressure range.
    - Hose and nozzle is unobstructed
    - Pull pin and visual seals are intact
    - Extinguisher is clean and free of corrosion
- There is a gauge located on the top of every fire extinguisher. All fire extinguishers should be reading in the green pressure range indicating 175 psi or 1210 kpa. All fire extinguishers are charged according to weight. All fire extinguishers in the warehouse are 10 lbs the forklifts contain 2.5 lb. fire extinguishers and the front office contains 5lbs fire extinguishers. Any fire extinguishers that do not read correctly should be noted and recharged.
- The inspector will sign the tag to signify inspection has been completed and satisfactory.

How to use fire extinguishers:

- Pull the Pin
- Aim extinguisher nozzle at the base of the flame
- Squeeze trigger while holding the extinguisher upright
- Sweep the extinguisher from side to side, covering the area of the fire

- Remember: This portable extinguisher is our first line of defense against fire.
- Proper maintenance and knowledge of how to use it may prevent an accident.
- Employees working in the warehouse will be trained on the use of the fire extinguisher. (Record training).

FIRST AID KIT

- All injuries should be handled as an emergency until assessed by the Emergency Response Co-ordinator. **Do not attempt to move** the injured individual; this is the responsibility of the personnel trained in the St. John's Ambulance First Aid course.
- In all aspects of emergency situations, **if the alarm does not sound, direct voice communication shall be made**. The individual who activates the alarm will then announce the location and nature of the emergency in a loud verbal manner.
- Repeat the emergency announcement until the Emergency Response Co-ordinator acknowledges receipt of the message.
- It is the responsibility of the Emergency Response Co-ordinator to advise contacting the Fire Department and/or Ambulance if the alarm was sounded and their services are not required.
- Please note: First Aid & CPR trained responders should be contacted immediately. Listings of these individuals are posted in the office lunchroom and in the Warehouse Lunch Room.
- Rescue operations should be done with extreme caution and using "common sense". All personnel trained in the St. John's Ambulance First Aid course will be assigned to medical duties until the ambulance team arrives. **No one should take unnecessary risks**.
- Any member of the warehouse crew available at the time of the emergency shall contact office personnel by phone, radio or otherwise.
- Calmly indicate that there is an emergency on the premises and give specific directions to the actual location of this emergency.

EYE WASH / SAFETY SHOWER

Maintenance

- The eye wash shower stations must be tested on a monthly basis to ensure proper working order and tested for any leaks. A check tag will then be affixed directly to the unit.
    - Place a container on the floor to catch the water during testing. Any water on the floor must be cleaned up.
    - Pull the handle on the safety shower and release.
    - Water will flow for approx. 20 seconds.
- To test eye wash portion of station.
    - Push the handle.
    - Let the water flow for approx. 2 minutes.
    - To turn off the water flow, pull the handle towards you.

- Replace the protective caps.

- Initial and date the tag once the testing is complete.

How to Use Shower:

- Call for assistance so there are two individuals at the shower.
- Stand directly beneath showerhead.
- Pull lever and let water continuously flow for a minimum of 5 minutes.
- While the assistant is holding lever down begin to undress, if require and product has soaked through under garments remove those as well.
- Emergency measures will be initiated for the emergency.
- Do not move from shower unless so directed by the Emergency Response Coordinator.

EYE WASH BOTTLE

Maintenance

- Employees working in the warehouse will be trained on the use of eye wash station.
- Wash the eye wash bottle and all necessary parts, cap, tubes etc. in a detergent solution.
- Rinse well to remove all traces of detergent.
- When filling do not squeeze bottle as airborne bacteria may be introduced when air re- enters.
- Under clean conditions fill bottle completely with solution.
- Replace top, close cap and return to emergency station.
- If a bottle is used, empty it completely.
- Check and refill with new solution as outline above once every month.
- After using an eye wash bottle the patient should see a physician at once for examination and treatment.
- Eye wash stations are only first response measures until medical treatment is obtained. Flushing within the first 10 seconds of eye emergencies is critical. The sooner an injured employee can flush their eyes the chance of eye damage can be significantly reduced or prevented.

How to Use Eye Wash Bottle:

- Press the eyecup gently against the socket of the eye while keeping the eye open.
- Rinse profusely by repeatedly squeezing the wall of the bottle.

- Seek medical attention immediately.

EYE WEAR PROTECTION

Maintenance:

- Disinfect eye protection equipment regularly by disassembling the eye protectors and thoroughly cleaning all parts with soap and warm water.
- Carefully rinse all traces of soap and replace defective parts with new ones.
- Swab thoroughly or completely immerse all parts for 10 minutes in a solution of germicidal deodorant fungicide.
- Remove parts from solution and suspend in a clean place for air dying at room temperature or with heated air.
- Do not rinse after removing parts from the solution because this will remove the germicidal residue, which retains its effectiveness after dying.
- Place the dry parts or items in a clean dust proof container or bag to protect them until reuse.

How to Use:

- Where protection to eye or face is required from flying objects dust, chemical splash or other irritants PPE shall conform to CSA standard.
- For chemical splashes the CSA recommended eye face shields protection is for group d-goggles, face shield and spectacles.
- Eye protectors must meet the following minimum requirements.
- Provide adequate protection against the particular hazards for which they are designed.
- Be reasonably comfortable when worn under the designed conditions.
- Fit snugly without interfering with movements or vision of the wearer.
- Be capable of being disinfected.
- Be durable.
- Be kept clean and in good repair.

- Employees who use corrective spectacles and those who are required to wear eye protection must wear face shield goggles or spectacles of one of the following types.
    - Spectacles with protective lenses providing optical correction
    - Goggles or face shields worn over corrective spectacles without disturbing the adjustment of the spectacles or goggles behind the lenses

- Lenses of eye protection are to be kept clean. Continuous vision through dirty lenses can cause eye stain.

BODY PROTECTION RUBBER APRONS / COVERALLS

Maintenance

- Inspect the clothing to ensure no tears or holes are present. If so, discard the clothing in a spill bag and label accordingly.
- Ensure all straps are in place and attached to apron.

How to Use

- Refer to the product label or Material Safety Data Sheets for the correct type of protection equipment.
- Rubber aprons made of a flexible plastic material which acids caustic chemicals water etc. should be long wearing, light weight and easily put on.
- Disposable suits of plastic like or other similar synthetic material are particularly important for protection from dusty material or material that can splash.
- The clothing shall be inspected to ensure proper fit, not too loose, and functional for continued protection.

BODY PROTECTION FOOT WEAR

- CSA approved protective footwear shall be worn at all times in the facility.

RESPIRATORY EQUIPMENT

Maintenance

- Only trained staff will use the respirator provided in accordance with the instructions and training received. Employees shall take all precautions to prevent damage to the respirator provided for use and shall report any malfunction or damage to their immediate supervisor.
- Prescribed and approved respirator masks of a type capable of providing protection from chemical must be available for use in the warehouse.

- Managers will train employees how to wear the respirator, how to check the fit and seal, and how to clean and store the respirator using the following guidelines (refer to respirator for more details).

- All respirators shall be used in accordance with manufactures written instructions.

How to Use

- Manager will ensure that appropriate respiratory protection as described in the Canada Standard Code and the appropriate Canadian Standard is available for use at warehouse.

INSPECTING THE RESPIRATOR

Maintenance

- Look for breaks or tears in the headband material. Also stretch to check the snap (elasticity).

- Make sure all headbands, fasteners and adjusters are in place and not bent.

- Check the face piece for dirt, cracks, tears or holes. The rubber should be flexible not stiff.

- Look at the shape of the face piece for possible distortion that may occur if the respirator is not protected during storage.

- To check the exhalation valve, unsnap the cover. Lift the valve and inspect the seat and valve for cracks, tears, dirt and distortion. Replace the cover. It should spin freely.

- The cartridge holders must be clean. Make sure the gaskets are in place and that the threads are not worn. Also look for cracks and other damage.

- Check the filters and if they have been used, change them by unsnapping the cover.

- Remove the used filter and throw it away. Check the cover for dirt or damage.

- Put a clean filter pad into the cover. Never load the filter into the cartridge holder. Always use the correct replacement filters.

- Snap the cover (with filter) on cartridges holder. Be careful not to damage the filter pad.

- If filter cartridge is used, unscrew the used cartridge. Check for dents and other damages especially to metal bead around the bottle.

- Screw the cartridge into holder. Hand tighten so there is good seal with the gasket in the bottom of the holder, but do not force it. If the cartridge will not go easily, back it out and try again.

FITTING THE RESPIRATOR

- To put on the respirator, place the face piece over the bridge of your nose and swing the bottom in so that is rests against your chin.

- Hold the respirator in place and fasten top strap over the crown of your head.

- Fit the respirator on your face and fasten the strap around your neck. Don't twist the straps. You can use the metal slides to tighten or loosen the fit but not too tight.
- Any employee with a beard shall not wear a respirator.

TESTING THE RESPIRATOR

- To test the fit, lightly cover the exhalation valve with the palm of your hand. Exhale. If there is a leak, you will feel the air on your face.
- Also test by covering the cartridge with the palms of your hand. Again, do not press too hard. Inhale. The face piece should collapse against your face.
- If there is a leak with either test, adjust the headbands or reposition the face piece and test until no leakage is detected.

CLEANING AND STORAGE

- To clean the respirator, remove the filters and cartridges and set aside. Disassemble face piece components.
- Wash components in warm water with a mild detergent. A bristle (not wire) brush can be used to remove dirt.

SHIPPING AND RECEIVING PROCEDURES

SHIPPING PROCEDURES "BILL OF LADING" (B.O.L.)

- When a B.O.L. is received in the shipping office the following procedures are to be used.
- Warehouse lead assigns a warehouse worker to stage product.
- All products must have the amount of PALLETS, the amount of CASES and the quantity of JUGS per case marked on the B.O.L. The individual picking the load will initial his counts. The warehouse lead checks the products staged against the bill of lading. The warehouse lead will also initial the count after it has been verified. Once the load check is completed, the warehouse worker can load the trailer.

  Example of counts: (2 x 36 x 2) + (12 x 2) = 168 jugs
  Full Pallet Quantities (P x C x J) + Less Than Pallet Quantities (C X J)

THERE WILL BE NO EXCEPTIONS ON THIS PROCEDURE.

- Once the trailer is loaded, all paper work is returned to the shipping office and the warehouse lead will calculate the weight of the load and document that on the driver's envelope. Placard will be attached to the driver's envelope if required.
- A white copy of the CWS bill of lading and a copy of the customer's bill of lading will be retained in the shipping office to be forwarded to the administration staff.

THIRD PARTY CARRIERS – BOL'S

- When calling a third party carrier for a pick up, indicate the date, time, location, weight of shipment, confirmation number (if applicable) and the persons' name that the pick up has been booked with on the B.O.L.
- Ensure that the math for the piece count is on the bill of lading and ensure that the carrier signs the bill.
- The carrier gets the green, pink and blue copies of the CWS B.O.L. and a copy of the customer's B.O.L.
- When you load the truck and are getting the B.O.L. signed by the carrier you must have your signature, the drivers name & signature, the date and the time the product was picked up as well as a total piece count on the B.O.L.
- The carriers Pro Sticker must be on CWS' white copy as well as on the carrier's copies of the B.O.L.

TRAILER SPOTTING

- Driver is assigned a dock and this is noted on assignment board.
- Driver then backs into the assigned door with trailer doors opened.
- The driver then chocks the wheels if the trailer is left.
- Once the trailer is spotted, CWS Logistics Ltd. personnel will open inside dock door and lower dock plate when rear of trailer is clear.

NOTE: If driver spots trailer for unloading with intent to pickup at a later time, shipping office staff will notify carrier when trailer is empty and ready for pickup. The call will be noted on Bill of Lading (when called, date and time).

- During loading, appropriate lot numbers are recorded by warehouse personnel if required.
- When trailer loading is completed, shipping office personnel will check product for count and proper product as per B.O.L. Driver and warehouse lead sign in assigned areas.
- Dock leveler is removed from rear of trailer and dock door is closed.
- Appropriate documentation is given to carrier. The yellow and white copies are retained and given to admin staff for processing.

RECEIVING ORDERS

- The carrier comes into the shipping office and is assigned a door by the warehouse lead.
- The carrier backs into the corresponding door. He must chock his wheels and set his brakes to ensure the safety of the forklift operator.
- The warehouse worker then puts the dock plate down and verifies that the trailer is safe to enter. The forklift operator stages the product being unloaded onto the floor, segregating any noticeable damaged product. All products are counted against the bill of lading ensuring that the product and quantity is correct.
- All products must have the amount of PALLETS, the amount of CASES and the quantity of JUGS per case marked on the B.O.L. The individual receiving the load will initial their counts. Any discrepancies must be noted and signed by the driver and the warehouse worker. The warehouse worker signs off on the bill of lading and one signed copy is retained by CWS for inventory purposes.

Example of counts: (2 x 36 x 2) + (12 x 2) = 168 jugs
Full Pallet Quantities: (P x C x J) + Less Than Pallet Quantities (C X J)

THERE WILL BE NO EXCEPTIONS ON THIS PROCEDURE.

- During unloading, appropriate lot numbers are recorded by warehouse personnel if required.
- Any damaged product must be noted on the bill of lading and must be signed off by both the driver and the warehouse worker.

- Once trailer has been emptied, the warehouse staff will sweep and remove any debris from CWS owned trailers only.
- Damaged product must be identified and put into the proper storage area. The forklift operator must follow spill / damaged procedure. See Spill Incident Reporting (S 207) Product for further information. If no damage is found, the product is then put into its proper storage area.
- On the receiving report, the damaged product must be noted separately.
- The documentation is then brought back into the shipping office; a receiving report is completed and forwarded to the administration staff.
- **The customer code, their product code and quantity per pallet will be marked on the pallet or product before it is put away.**

EMERGENCY RESPONSE PLAN

POLICY

- Emergency Response Plan in separate binder.

STORAGE, RECEIVING AND PACKAGING OF SODIUM HYDROSULFITE

INTRODUCTION

- ***Sodium Hydrosulfite is oxidized in the presence of moisture to sodium bisulfite, and presumably can produce sulfite toxicity even through no adverse human effects could be documented. According to published studies, Sodium Hydrosulfite poses no known chronic effects on humans.***
- Sodium Hydrosulfite does not have an established OSHA PEL due to its lack of systematic toxicity. This means that a person could stand in a visible cloud of product for eight (8) hours before exceeding the permissible limits.
- The toxicity of Sodium Hydrosulfite is only acute and does not have chronic effects to the body. It can cause irritation of the upper respiratory tract and eyes. If a person is sensitive to sulfites such as wine or sulfur drugs, they could be sensitive to Sodium Hydrosulfite.

STORAGE AND HANDLING

- Sodium Hydrosulfite will be stored in the clearly defined area of the warehouse.
- It will be stored in a cool and dry location of the warehouse that is well ventilated. The temperature should not exceed 50°C.
- It will be segregated from incompatible products as per the National Fire Code.
- The product must be protected from moisture and heat. Therefore all bins will be closed when not in use. Each container should be checked daily to ensure that they are closed tightly.

TRANSFERING PRODUCT FROM IBC CONTAINERS TO STEEL TOTES

- When transferring / packaging the product, only clean and dry tools will be used to ensure the integrity of the product.
- Personal Protective Equipment should be worn when packaging / transfer the product.
- IBC containers will be opened and the mini bulk bags inside will be inspected for damages.
- When transferring from the mini bulk bag to the steel tote, the product will be screened through a hopper to eliminate any debris that may be present.
- Always use the dust collector when transferring product.
- Each container will be monitored daily for decomposition. A remote digital thermometer will be used to determine any increases in temperature.
- Steel bins will be cleaned after filling so that there is no residual dust present on the legs or top.
- The lids of the steel bins must be secured with the lid ring and the lock nut must be tightened so that the lid ring does not ever come loose.

- All four sides of the steel tote must have placards and the front and back of the steel tote must have product labels.
- All debris that is cleaned up is to be put into a spill bag and then placed into a steel containment drum. The lid on the containment drum must be secured with the lid ring.
- Empty mini bulk bags will be repacked into an empty IBC container (both halves) and when the IBC is full, put the two halves together and make sure the locking bolts are tightened down to ensure that the container is sealed. If an IBC is not completely filled and the halves cannot be put together a sheet of plastic will be placed over the empty bags to keep them dry.
- Empty IBC containers will be stacked into a stack of 10 halves for return to supplier.

CLEANING THE DUST COLLECTOR

- The drum of the dust collector will be emptied after every transfer operation. The fines will be placed into a steel containment drum. The lid on the containment drum must be secured with the lid ring.
- The socks inside the dust collector will be changed at a minimum of every 3 months, at this time the inside of the dust collector will be cleaned as well. The fines will be placed into a steel containment drum. The lid on the containment drum must be secured with the lid ring.

HANDLING A SPILL

- In the event that there is a spill, the product must be contained and swept or vacuumed up. It must then be put into a RCRA approved waste container.
- Isolate the spill of the product.
- The sodium hydrosulfite must NOT be mixed with organic materials.
- Once the product has been cleaned up, the area must be washed down with copious amounts of water or vacuumed up with an approved vacuum.
- The material must be disposed of according to the RCRA Regulations.

CLEANING / HANDLING FLOOR SWEEPINGS OUT AF A TRAILER

When picking up empty steel totes from the customer, the best way to eliminate spillage is to make sure the slides gates are closed and the locking mechanism is utilized before loading the empty steel totes. This will minimize any product from leaking out of the steel tote while it is in transport.

- In the event that there is a small spill in a trailer, the product must be contained and swept up. DO NOT LEAVE THE PRODUCT ON THE FLOOR AS THE HYDRO COULD BE MIXED

WITH MOISTURE OR OTHER INCOMPATIBLES FROM THE FLOOR CAUSING IT TO REACT.

- Immediately place the product into a container of water. The container must be able to withstand some heat (up to 150F).
- Do not breathe in or around the headspace of the container when placing the Hydro into the bath. The dust or a small amount of irritating vapor may be given off. The amount given off is not harmful unless you get very close. The vapors dissipate very quickly. (Similar to opening a bottle of store bought bleach and getting close to the opening)
- Make sure the Hydro sweepings are totally submerged in the water.
- Minor agitation will ensure as much Hydro has been dissolved as possible. Agitation can be achieved by water spray from a hose or by stirring with a stick.
- Wash down the drain or dispose of in accordance with local laws and regulations.

HANDLING A FIRE

- Do not attempt to deal with a fire involving Sodium Hydrosulfite unless you are properly trained or qualified.
- In the event that there is a fire, the Sodium Hydrosulfite will smolder and generate very high temperatures, up to 427°C, when decomposing and will liberate S02 gas. The container will not explode when undergoing decomposition. Therefore, the container involved in the fire should be isolated and all other containers should be removed to a safe area, at least 50 meters from the concerned area.
- Isolate the fire area immediately for at least 500 meters in all directions for public safety.
- Keep all unauthorized personnel away from the area of concern.
- Stay upwind from the fire.
- Protective clothing and a positive pressure self contained breathing apparatus must be worn.
- The decomposition products of the fire will be sulfur dioxide.
- The material will harden after it has reacted. Once the product is cooled, it can be placed in a plastic bag and put into an approved landfill. The harden product is sodium sulfate.
- The liquid that is produced must be contained in a holding tank and must be treated before being released into the sewage system.
- All other containers should be checked for an increase in temperature by the IR gun. If there is an increase in temperature the container must be continually monitored and the pressure on the container should be relieved.

IDENTIFYING DECOMPOSING CONTAINERS

- Containers that are undergoing decomposition will show signs of over pressurization by

indicating bulging sides. The lids of the containers may come off due to the pressure build up. Metal IBC's have a relief device located on the top of the container that should be opened to relieve the pressure. These containers WILL NOT explode.

- The containers and area should be monitored for increased levels of SO2 and H2S.
- The container showing signs of decomposition should be removed from the other containers and organics that can burn such as paper, wood, etc.
- A container will liberate SO2 and can decompose for 24 to 72 hours.
- The only way to stop the reaction is to remove the heat, which requires cutting open the container with heavy equipment and dumping the contents in a water bath. This requires HazMat Technicians.
- The hot zone should be approximately 50 meters around the decomposing container.

CONTROL VALVE OPENING / CLOSING LOG

CWS Logistics Ltd. - 1500 Clarence Ave, Winnipeg, MB

	Any spills in secondary containment area?		Any unusual odor to water?		Water Level at Manhole	Is water OK to release		Authorized Person	Signature
Date	Yes	No	Yes	No	Inches	Yes	No		

If any leaks, spills or unusual occurrences have occurred, do not open valve.

Additional Comments: _____

ONSITE SPILL PLAN

PROCEDURE: IN CASE OF AN ONSITE SPILL

PURPOSE

The purpose of this section is to outline our plan to cover all types of spills.

1. All spills must immediately be reported to the Emergency Response Coordinator.

2. Should the spill be of a nature that may be health or life threatening, the Emergency Response Coordinator shall make the decision to evacuate the premises as well as notifying "911" and notify civil response agencies as well as the manufacturer of the product. Certain types of situations may require outside assistance.

3. In all aspects of onsite spills, the Emergency Response Coordinator shall ensure that all efforts will be made to contain the spill using all resources available to our location such as:

   a) Neutralizers and/or absorbent materials, which are well stocked at all times.

   b) All emergency equipment that may be needed such as rubber suits, breathing apparatus, etc.

   (Refer to Emergency Equipment Map for location of personal protection equipment and spill clean up supplies.)

4. The Emergency Response Coordinator shall be responsible to take all action necessary to prevent fire or explosion during the containment of the spill such as ensuring that all possible ignition sources are eliminated.

5. Confirm the gate valves (2) inside the pit at the shipping receiving door are closed to contain the loading dock. (These are to be closed at all times.)

6. As a precaution cover the storm sewer manholes (3) in the parking lot with rubber mats and sand bags.

Interior Warehouse Containment
26,996 cubic ft

Loading Dock Containment
14,000 cubic ft

Total fire water retention:

Location of Containment	Cubic Feet
Total Interior Containment (Primary)	26,996

Loading Dock Containment (Secondary)	14,000 cu/ft
Total Secondary Containment	**14,000 cu/ft**
Total Site Containment	**40,996 cu/ft**

1.1 ACTION AFTER THE EMERGENCY

1. The Emergency Response Coordinator will be responsible to ensure that any hazardous waste in the event of the spill is properly treated, stored and disposed of in accordance with Federal and Provincial regulations.

2. The Emergency Response Coordinator shall be responsible for reporting any spills released into the environment as required by Government and local legislation and reports must be made internally on all spills.

3. Soil samples will be taken from the onsite piezometers and tested for contaminates. Copies of the results will be forwarded to the necessary officials.

4. It is the responsibility of the offsite emergency response personnel to remove and dispose of contaminants from individuals, their clothing and equipment in accordance with Federal and Provincial regulations.

APPENDIX E

EMERGENCY RESPONSE PLAN

Table of Contents – Last Revised August 30,2012

POLICY STATEMENTS

It is CWS Logistics Ltd's policy to conduct its operations with the highest regard for the safety and health of its employees, the public, for the protection, preservation of the property and the environment. CWS Logistics Ltd's Emergency Response (ER) Plan is a coordinated function encompassing the areas of safety and health, fire protection, environmental control, security, training, public affairs, communications, quality control maintenance, and operations. The program provides an effective state of readiness to respond to, prepare for, mitigate, and recover from a range of credible or potential emergencies at the facility. Such capability is considered a fundamental responsibility of this Emergency Response Plan.

Emergency management procedures provide a clear, concise description of the overall emergency response organization. They designate responsibilities, demonstrate interface between organizations, and describe notification procedures necessary to cope with all aspects of emergency situation.

Effective response includes those actions in areas such as warning, personal safety, property protection, security, and restorations taken to prevent or minimize the effects of a disaster. Once a disaster has occurred, every effort will be taken to safely improve the situation. CWS Logistics Ltd's response plan provides for the implementation of emergency response management requirements.

SCOPE

This Emergency Response Plan gives specific instructions for responding and dealing with a variety of emergency events. These procedures will be used in training, indoctrination of new employees, and in practice sessions to develop the abilities of all employees to act responsibly and properly in any emergency.

Much of the pre-planning for emergencies required by this Emergency Response Plan is also required by Federal regulations. In addition, Provincial and local regulations may also require contingency planning. The responsibility of complying with Provincial and local regulations in regards to pre-emergency planning rests with the local Manager. Nothing contained in this instruction is intended to conflict with Federal, Provincial, or local regulations or ordinances.

Changes will be made to this instruction as regulations require them or as we perceive a need for a change. In the meantime, feel free to contact Chris Erickson at (204) 453-2261 if you wish to comment on changes you feel necessary.

All users of this Emergency Response Plan manual must be thoroughly familiar with their own role and responsibilities in an emergency situation. They must be familiar with the emergency equipment and supplies at their location and above all they must know the location of the alarm pull stations, fire extinguishers, and protective equipment nearest their normal work location.

The following documents or portions thereof have been used to complete this Emergency Response Plan:

1) Emergency Planning for Industry - Major Industrial Emergencies CAN / CSA-Z731-95
2) Professional Competence of Responders to Hazardous Materials Incidents, NFPA 472-1997 Edition
3) Recommended Practice for Disaster Management, NFPA 1600-1995 Edition

For the purposes of this Emergency Response Plan the terms Disaster or Emergency will include the below events:

1) Snow / Ice / Hail
2) Extreme Cold
3) Lightning Storms
4) Wind

TECHNOLOGICAL / INDUSTRIAL EVENTS

1) Hazardous Material Releases
2) Explosions / Fire
3) Transportation Accidents
4) Building / Structural Collapse
5) Power / Utility Failure
6) Fuel / Resource Shortages

EMERGENCY RESPONSE TEAM ORGANIZATIONAL CHART

OFFSITE PERSONNEL

Fire Fighters and Hazardous Chemical Squad (Emergency Response Coordinator)	i. City of Winnipeg ii. Headquarters Switchboard iii. Fire Prevention	911 (204) 986-6380 (204) 986-6358
Medical Support	i. Poison Control Center ii Victoria General Hospital (Emergency) 2340 Pembina Highway	(204) 787-2591 (204) 477-3121
Manitoba Environmental Officers	i. Winnipeg Environment Spill Report Center	(204) 945-4888
Police and Bomb Squad Experts	i. City of Winnipeg	911
Hazardous Waste	i. Hazardous Waste Services	(204) 945-0992
Utilities Emergency Response	i. Power ii. Natural Gas iii. Water & Waste	(204) 480-5900 (204) 480-1212 (204) 986-5858

ONSITE PERSONNEL

Emergency Response Coordinator	**Greag Elias** Alternate #1: **Mark Paziuk**
Initial Communication	Fire Alarm, Radio Communication or by Voice Command
First Aid & CPR	Refer to posted list in First Aid Room and Alternate Offsite Emergency Responders
Traffic Control	**Mark Paziuk**
Evacuation of personnel not employed by CWS Logistics Ltd.	**Greg Elias** Alternate #1: Mark Paziuk
Media Relations	**Shawn Bergen**

ROLES & RESPONSIBILITIES

EMERGENCY RESPONSE COORDINATOR

1. Assumes total control over site activities; and has authority to direct CWS Logistics Ltd's response operations until the appropriate offsite personnel arrive.
2. Dial 911 or designate someone to call 911.
3. Assess the situation and decide whether or not to evacuate all personnel.
4. Initiate the Neighborhood Warning Plan.
5. Enforces the safety procedures during the emergency.

6. Briefs the field teams on their specific assignments.

7. Documents field activities and sample collections.

8. Provide information to the Fire Department - offsite emergency response coordinator:
   a) On the hazards and harmful effects of specific chemicals - material safety data sheets are to be made available at the command center;
   b) On the characteristics of specific containers;
   c) On potential response options for specific chemicals.

9. Notifies emergency response personnel by telephone or radio in the event of an emergency.

10. Maintains a log of communication and site activities.

11. Maintains line-of-site and communication contact with the work parties via radios, cellular or other means.

12. Provide adequate guidance and instruction to relocate employees to the designated assembly points.

13. Ensure all employees are accounted for by doing a head count at the designated assembly point.

14. Prepares the final report and support files on the response activities.

Assessing the Emergency

The Emergency Response Coordinator will assess the situation once the initial communication has been announced; and decide whether or not to evacuate all personnel.

a) The emergency must be evaluated quickly and the proper resources must be called. It is important to try not to over-react but it is still better to over-react than to fall short in our response. The nature and extent of the problem must be evaluated, it's potential to escalate, the risk of significant damage to and its impact on people, property and the environment must be considered.

b) Once an assessment is made, there are only two (2) choices:

EVACUATE

OR

ATTEMPT TO HANDLE THE SITUATION

1. **HANDLE THE SITUATION:**

   a) If the decision is made to control the situation locally, the ER Coordinator takes full control and will initiate the ER Plan.

2. **EVACUATION:**

   a) If evacuation is the decision, then the ER Coordinator will carry out his / her responsibilities.

   b) Instruct all employees who have ERP responsibilities and are not present at the time of the incident will have their duties fulfilled by their alternate.

   c) Initiate the Neighborhood Warning Plan.

NEIGHBOURHOOD WARNING PLAN

1. All businesses within the 100-meter radius of CWS Logistics Ltd. facility will be notified with any possible situation that may affect their operation.

2. A phone call will be made by CWS Logistics Ltd. regarding a possible emergency situation.

3. **The following is a list of businesses within the 100-meter radius:**

A.	Partners for Learning	(204) 284-2255
B.	Lindenridge Animal Hospital	(204) 453-3221
C.	Dr. Timmerman	(204) 478-0555
D.	Diageo	(204) 453-7447

E.	Molson Breweries	(204) 475-1786
F.	MB Marathon	(204) 415-4517
G.	Global	(204) 925-3350
H.	Massage Athletica	(204) 781-4073

The alarm message is as follows:

This is to advise that CWS Logistics Ltd. is experiencing a problem at its site located at 1664 Seel Avenue in Winnipeg. Please call (204) 453-2261, identify your company, and further information will be provided.

EMERGENCY RESPONSE COORDINATOR (S)

Name	Greg Elias CWS Logistics Ltd.
Title	Facility Manager – Winnipeg
Work	(204) 453-2261
Portable	(204) 999-9908

ALTERNATE # 1

Name	Mark Paziuk
Title	Transportation Manager – Winnipeg
Work	(204) 453-2261
Portable	(204) 223-1631

INITIAL COMMUNICATION

1. In all aspects of emergency situations, if the alarm does not sound, direct voice communication shall be made.

2. Any member of the warehouse crew available at the time of the emergency shall contact office personnel by phone, radio or otherwise.

3. When the alarm goes off, the following emergency plan should be followed:

   a) Please refer to the map for emergency evacuation stating exits and escape routes.

   b) Under no circumstances, after evacuation, should any employee return to the building for personal belongings.

   PRESERVATION OF HUMAN LIFE IS THE PRIME CONSIDERATION.

4. The fire alarm must be activated in any of the following situations:

   a) Fire - any sign of smoke or flame.

   b) Explosion - with which there is always a high likelihood of a subsequent fire, and the possibility of escape of toxic gases and of personal injury.

   c) Escape of hazardous materials (liquid, gas, solids, or unusual odor) - when judged by those present as being a concern or threat to those in the immediate area, in other parts of the plan site, or in neighboring areas outside the plant.

   d) Serious injuries or fatalities.

   e) Natural disasters, threats or external accidents, when judged by those present as being an immediate hazard or concern to personnel or operations.

5. The individual who activates the alarm will then announce the location and nature of the emergency in a loud verbal manner.

6. Repeat the emergency announcement until the Emergency Response Coordinator acknowledges receipt of the message.

7. Initiate the Neighborhood Warning Plan.

FIRST AID AND CPR

1. Please note: - First Aid & CPR trained responders should be contacted immediately.

2. Rescue operations should be done exceedingly carefully and using "common sense". All personnel trained in the St. John's Ambulance First Aid course will be assigned to medical duties until the ambulance team arrives. No one should take unnecessary risks!

TRAFFIC CONTROL

1. Traffic control will be required until the police arrive -as indicated on the map as Employee Traffic Control Points.
2. All incoming vehicles, with the exception of Offsite Emergency Responders, should be turned away.
3. Stand in the middle of road to direct traffic - do not position yourself on the road where you could sustain injury by a vehicle. WATCH FOR TRAFFIC.

EQUIPMENT SHUTOFF

1. Follow the standard operating procedures (SOP) to shut off equipment at time of an emergency.

EVACUATION OF PERSONNEL NOT EMPLOYED BY CWS LOGISTICS LTD.

1. Any other people on the premises not employed with CWS Logistics Ltd. should be immediately evacuated from the building and completely off the grounds.

2. Depending on the situation the ER Coordinator may instruct trucks to be removed from the Loading area. It will be the responsibility of the Transport Companies' driver to remove the vehicle safely from the building. The Evacuation office will assist the drivers as long as it is safe to do so. Reminder: Property can be replaced, human life cannot.

3. Report to the ER Coordinator the number of vehicles that have been evacuated, the drivers and their vehicles that have remained on site.

4. Escort the drivers to the Initial Employee Assembly Points.

MSDS and ER PLAN

1. Take copy of MSDS book and Emergency Response Plan to the assembly point.

ASSEMBLY POINTS

1. As designated on the Facility Evacuation Routes Plan. Once the head count has been completed the ER Coordinator or Offsite ER Coordinator will relocate employees away from the site.

2. The ER Coordinator will make arrangements with a local taxi company to pick up employees at a designated area and take them home.

Duffy's	(204) 925-0101
Unicity	(204) 925-3131

3. Employees are not to stop to remove vehicles.

MEDIA RELATIONS

1. Refer to Media Relations Guidelines found in this Emergency Response Plan.

EMPLOYEES' RESPONSIBILITIES IN EVERY EMERGENCY

PROCEDURE: IN CASE OF AN EMERGENCY NO MATTER THE SITUATION

Warehouse staff on forklifts:

1. If on a forklift when an initial communication is sounded - park forklift away from any exit aisle. Lower forks, turn lights on and turn engines off, turn off propane.

2. Remove radio and flashlight from forklift and carry to assembly point.

3. If the emergency situation permits, the employees with designated responsibilities, inside the building, should attempt to complete their emergency response tasks during an emergency.

4. Proceed to the nearest exit and evacuate the building and proceed directly to the assembly point.

5. Any employees who are not in the building should NOT re-enter upon alarm initiation.

PROCEDURE: IN CASE OF AN EMERGENCY NO MATTER THE SITUATION

Warehouse staff and Office staff:

1. If initial communication is sounded via radio and you are unsure of the instructions, have the Responder repeat the order to evacuate.

2. Take radio with you to assembly point.

3. If the emergency situation permits, the employees with designated responsibilities, inside the building, should attempt to complete their emergency response tasks during an emergency.

4. Proceed to the nearest exit and evacuate the building and proceed directly to the assembly point.

5. Any employees who are not in the building should NOT re-enter upon alarm initiation.

FIRE & EXPLOSION PLAN

Reminder: the Emergency Response Coordinator will direct Operations during an emergency.

PROCEDURE: IN CASE OF A FIRE OR EXPLOSION

1. **Call 911**
   This call must be made no matter how big or small the fire may be. If the fire is small and can be contained by personnel, the fire department will make sure, upon their arrival, that the fire is indeed properly extinguished. However, the condition from small could lead to extreme, while the fire department is on its way to help.

   Contingency: If this call cannot be made from our building, due to dangerous circumstances, the Emergency Response Coordinator shall designate a person to make this call from the nearest neighbor - this will ensure that a call has been made.

   EMERGENCY 911

   Example of what to say:
   What to say when calling this number in the event of a fire:

   This is (your name) from CWS Logistics Ltd., a chemical distributor.

   Our address is 1664 Seel Ave., Winnipeg and we have a fire.

   Please send your
   EMERGENCY RESPONSE TEAM (HAZMAT) (and/or)
   AMBULANCE (and/or)
   POLICE

2. **Evacuate?** The Emergency Response Coordinator, depending on the situation at hand, will make this decision. This procedure is not complete until all personnel are accounted for, as per the evacuation plan.

3. If the fire can be defined as "one which is in the initial or beginning stage" and can be controlled without the need for protective clothing or breathing apparatus, the ER Coordinator shall be responsible for allowing the appropriate personnel to handle the extinguishers to contain the fire.

4. The Emergency Response Coordinator should stand by to meet and direct the Fire Department's Emergency Response Team and aid them with his/her knowledge of the facility and materials stored in the building.

5. The Emergency Response Coordinator will remind designated personnel to direct traffic away from the emergency, if possible, until the police department arrives to take over.

6. The Emergency Response Coordinator will activate the Neighborhood Warning System.

7. The most important point: **STAY CALM!**

8. All staff upon evacuating the premises in the event of an emergency will walk in a brisk but orderly fashion to the designated meeting spot for the head count.

9. **NO ONE** will drive his or her vehicles unless asked to do so. Everyone trying to get out of the parking lot at once could cause more danger and this could also cause havoc for an emergency vehicles trying to get on site.

10. The Emergency Response Coordinator shall also make note of any trucks located in our yard and if it is feasible to move them without endangering the driver.

11. Within 24 hours of the incident a report shall be filed by the Emergency Response Coordinator detailing the incident, Emergency Response Teams actions and results.

POWER FAILURES & STRUCTURAL COLLAPSE

PROCEDURE: IN CASE OF A POWER FAILURE

1. If on a forklift when the power / lights fail, park forklift away from any exit aisle, lower forks, turn engine off, and shut off propane.

2. Remain at the forklift and wait for initial communication. Turn on lights of forklift and flashlight.

3. If an alarm or the verbal command is given to evacuate and, if the emergency situation permits, all the employees with designated responsibilities to perform during an emergency should attempt to complete the tasks prior to evacuating the building.

4. Once the command for evacuation is given proceed to the nearest exit and evacuate the building.

5. Any employees who are not in the building should **NOT** re-enter upon alarm initiation.

6. If the communication is given to remain in the building, the Emergency Response Coordinator will request an acknowledgment of your location. Do not leave your forklift, and await further instructions.

7. If you are not on a forklift, proceed to the nearest exit and follow the instructions in the "Employees' Responsibilities in Every Emergency" on how to evacuate the premises.

PROCEDURE: IN CASE OF A STRUCTURAL COLLAPSE

1. If you have witnessed the structural failure initiate the initial communication and immediately inform the Emergency Response Coordinator what the circumstances are and where the incident has occurred.

2. The Emergency Response Coordinator will assess the situation and make a decision and inform the employees as outlined in the responsibilities.

BOMB THREAT PLAN

PROCEDURE: IN CASE OF A BOMB THREAT

The City has a bomb disposal unit. The number to call is 911. The police would come to our facility and investigate.

The police did indicate that the best thing we could do, is be on the lookout for unfamiliar packages as this would one of the things they would ask us upon receipt of our call.

The following is a general plan we shall follow should this type of emergency occur.

1. **STAY CALM**. If possible keep caller on the line and inform another staff member to call 911.

2. Obtain and record as much information about the bomb and the caller as possible. Use the checklist BOMB THREAT CHECKLIST located in the appendix.

3. Police will assign a bomb squad to assist in the search.

4. If a specific site was named as the bombsite, the Emergency Response Coordinator shall make the decision to evacuate.

ONSITE SPILL PLAN

PROCEDURE: IN CASE OF AN ONSITE SPILL

The purpose of this section is to outline our plan to cover all types of spills.

1. All spills must immediately be reported to the Emergency Response Coordinator.

2. Should the spill be of a nature that may be health or life threatening, the Emergency Response Coordinator shall make the decision to evacuate the premises as well as notifying "911" and notify civil response agencies as well as the manufacturer of the product. Certain types of situations may require outside assistance.

3. In all aspects of onsite spills, the Emergency Response Coordinator shall ensure that all efforts will be made to contain the spill using all resources available to our location such as;

   a) Neutralizers and/or absorbent materials, which are well stocked at all times.

   b) All emergency equipment that may be needed such as rubber suits, breathing apparatus, etc.

4. The Emergency Response Coordinator shall be responsible to take all action necessary to prevent fire or explosion during the containment of the spill such as ensuring that all possible ignition sources are eliminated.

SITE CONTAINMENT

1. The warehouse storage area has curbing 15.24 cm in height around the perimeter specifically used as primary containment for chemical spills or firewater retention with 12.7 cm ramps to direct water to the loading dock area for secondary containment.

2. Loading Dock Area on the East side of the building is secondary containment for chemical spills & firewater retention. Refer to drawings located in the appendix.

ACTION AFTER THE EMERGENCY

1. The Emergency Response Coordinator will be responsible to ensure that any hazardous waste in the event of the spill is properly treated, stored and disposed of in accordance with Federal and Provincial regulations.

2. The Emergency Response Coordinator shall be responsible for reporting any spills released into the environment as required by Government and local legislation and reports must be made internally on all spills.

3. Soil & water samples will be taken and tested for contaminates. Copies of the results will be forwarded to the necessary officials.

4. It is the responsibility of the offsite emergency response personnel to remove and dispose of contaminants from individuals, their clothing and equipment in accordance with Federal and Provincial regulations.

VIOLENCE

PROCEDURE: VIOLENCE

1. Employees must report all incidents of violence to their manager and or the human resource manager as soon as possible. (See Violence Report Form)

2. The employee who has been a victim of violence will be given the opportunity, on company time, to be examined by the employee's physician. A worker who visits a physician or other health care specialists for treatment or counseling will not lose any pay or other benefits.

EMPLOYER PROCEDURE

1. All violent incidents will be reviewed by the Facility Manager. The Facility Manager will assess the effectiveness of the policy statement and violence prevention program of CWS Logistics.

2. The Facility Manager will examine all the police recommendations and discuss them with the employees.

3. Any deficiencies will be documented and appropriate changes made. The Employees will be informed of the results of the investigation and any resulting changes to the policy statement and prevention program.

4. Training will be provided on how to carry out the procedures involving violence.

If violence occurs by any employee against another employee, an employee against a non employee and or a non-employee against an employee;

1. Immediately call the police. The number of the police is 911. Inform the parties involved that the police have been called.

2. Offer medical attention; if applicable, and if required immediately call an ambulance. The number for an ambulance is 911. Inform the parties involved that an ambulance has been called.

3. If applicable, separate the two parties from each other and detain until the police arrive.

4. Identify and investigate the fight from both parties, if possible.

5. Fill out Violent Incident Report Form.

6. See PROCEDURE FOR EMPLOYER (above)

7. See PROCEDURE: VIOLENCE

MEDIA RELATIONS

GUIDELINES

Designated CWS Logistics Ltd.
Spokesperson: **Shawn Bergen**

Alternate Spokesperson: Greg Elias

The following are statements for crisis communications:

1. Obey the cardinal rule: **Tell it all and tell it fast and tell it straight**. There is no better or more effective way to stop rumors and calm nerves than to provide accurate information on the crisis as fully and quickly as possible. The flow of information tends to signal that, while things are not in perfect order, there at least are persons somewhere, somehow, reining in the controls. In other words, if "they" can report what is happening, "they" know what is happening and in short order will know how to straighten things out.

2. Cover all bases and all of the important subjects, to the extent possible. Whatever information is available, as long as it does not involve some security or confidentiality issue, should be made public. If a particular area is not detailed, questions will focus on it and make it far more crucial than it may be.

3. Provide regular updates to the news media. An exceptionally fluid situation requires frequent updates. In a crisis situation, there are very few times when there is too much contact with the media and the public. Minute-by-minute accounting builds up a trust and confidence. Lapses in the information flow will stimulate speculation and heighten anxiety.

ON CAMERA TELEVISION SUGGESTIONS

1. RELAX - get comfortable, don't be a statue, BE YOURSELF. Speak informally; using everyday, non-scientific, two-syllable language.

2. Do not expect to read prepared statements unless asked to do so.

3. Speak directly to the reporter, not the camera; ignore microphones, cameras and cameramen. Look steadily at the reporter.

4. Answer questions openly, honestly and candidly.

5. Pitch your voice to the same level as the reporter.

6. Be ready to answer: "What is the most important thing I want to tell the audience?"

7. Keep your answers short and understandable; do not ramble.

8. Keep three or four major points in mind and seek to use them at the earliest opportunities; take the initiative.

9. Do not express opinions. Cite facts and use concrete examples whenever possible.

10. Take time to think before answering complicated questions.

11. If you do not have an answer to a question, say so, but indicate that information will be provided as soon as possible.

12. Do not try to be an expert outside your field.

13. Seek to turn negative questions with positive answers.

14. Do not be argumentative. If a question is unfair or confusing, say so.

15. Challenge any incorrect assertions, and then deal with the question.

16. Ploys used by abrasive reporters to adversely affect you are: surliness, mispronunciation of your name, false-premise logic, insulting questions, and interruptions of answers.

AFTER HOURS EMERGENCY PROCEDURE

In the event of an after-hours emergency incident, our 24-hour fire detection and monitoring company, Pro TELEC Alarms, will phone a list of employees as follows:

NAME	**PHONE – Cellular**
Greg Elias	(204) 999-9908
Mark Paziuk	(204) 223-1631

Pro TELEC Alarms is also responsible for calling authorities in the event their monitors signal an alarm.

Pro TELEC Alarms will contact the Fire Department First if a fire alarm sounds. Chris Erickson will be notified next.

The person who gets the call from Pro TELEC Alarms will indicate to the others down the line that he is the initial caller so we know where the list ends.

Each member on this list will have a copy of these procedures. Once the first person arrives on the scene, he / she will let authorities on the grounds if they are not already. He / she will then use his / her Emergency Response Plan to assist authorities in every way possible.

Also, the first person on the scene will become the Emergency Response Coordinator until the designated Emergency Response Coordinator arrives on the scene at which time he will take over after being fully informed by all employees who are already on the scene.

Pro TELEC Alarms:	Ph: (204) 949-1417
Vipond:	Ph: (204) 783-2420

NOTICE TO OFFSITE FIRST RESPONDERS

Please be advised that during off hours, nights and weekends, the office and warehouse at our location is protected against intruders by locks on doors and gates.

All Onsite Emergency Response Coordinators have keys for each lock. All Offsite Emergency Response personnel, by copy of the Emergency Response Plan, have the authority to shear the lock(s) or break down the door(s) in order to gain entry and respond to an emergency.

_____ _____

Manager Date

DIRECTORIES

EMERGENCY QUICK REFERENCE LIST

Purpose: Quick reference list of outside emergency response available to assist CWS Logistics Ltd. in the event of an emergency.

EMERGENCY – 911 Is the emergency number - dispatches fire department, police department, poison control etc.		**911**
Poison Hotline (Poison Control Center)		**(204) 787-2591**
PROVINCE OF MANITOBA SPILL CONTROL CENTRE		**(204) 945-1414**
CANUTEC - 24 HOUR SERVICE - CALL COLLECT A public service for the Transportation of Dangerous Goods of the Federal Government that provides immediate emergency information then contacts the shipper of the material.		**1-613-996-6666**
Mark Paziuk - Transportation Manager	Office	**(204) 453-2261**
	Cellular	**(204) 223-1631**
Greg Elias – Facility Manager	Office	**(204) 453-2261**
	Cellular	**(204) 999-9908**
Shawn Bergen – Executive Vice President	Office	**(204) 474-1339**
	Cellular	**(204) 771-9977**
Poison Control Center		**(204) 787-2591**
Utilities	Power	**(204) 480-5900**
	Natural Gas	**(204) 480-1212**
	Water	**(204) 986-5858**

CHEMICAL COMPANIES

CANUTEC 24 hour service call collect (613) 996-6666 CHEMTREC 1-800-424-9300	
* Below are 24 hour numbers unless indicated otherwise	
Arvesta	1-800-424-3900
BASF Canada Inc.	1-800-454-2673
Bayer	1-514-697-5555
Cargill Limited - PSC Emergency Response	1-800-567-7455
Cheminova Canada	1-613-996-6666
Dow AgroSciences	1-519-339-3711
DuPont Canada Inc.	1-613-348-3616
Engage Agro	1-800-267-1373
Federated Cooperatives Ltd. (Regina)	1-306-721-5222
Interprovincial Cooperatives Ltd.	1-613-996-6666
James Richardson & Sons Limited	1-613-996-6666
Johnson Diversey	1-800-424-9300
Monsanto Canada Inc. (Accidents and spills)	1-800-332-3111
Monsanto Canada Inc. (Medical emergencies)	1-314-694-4000
Nalco Canada	1-800-463-3216
Nufarm Agriculture Inc.	1-202-483-7616
Quadra Chemicals (Newalta)	1-800-567-7455
Syngenta	1-800-267-6351
United Farmers of Alberta	1-800-592-5585
Univar	1-800-424-9300

POLICE / FIRE / HOSPITALS

IMPORTANT PHONE NUMBERS - NON EMERGENCY

POLICE	1350 Pembina Hwy	**(204) 986-6042**
FIRE DEPARTMENT	Main Number	**(204) 986-6380**
	Fire Prevention Branch (yearly building inspections upon request)	**(204) 986-6358**
HOSPITALS	Victoria General Hospital 2340 Pembina Hwy	**(204) 269-3570** (switchboard)
	Grace Hospital 300 Booth Drive	**(204) 837-8311** (switchboard)

HAZARDOUS WASTE

PROVINCIAL Environment Accident Reporting (Manitoba Conservation)	(204) 945-4888
FEDERAL Environment Accident Reporting (Use Manitoba Conservation)	(204) 945-4888

DISTRIBUTION OF EMERGENCY RESPONSE PLAN

The following have a copy of our Emergency Response Plan and as this plan is updated and upgraded, copies will be forwarded to these people. (14 books)

Copy No.	Name	Company/Location
1	CWS Logistics Ltd. (Regina)	Office – Regina
2	Mark Paziuk (CWS)	Home – Winnipeg
3	Greg Elias (CWS)	Home – Winnipeg
4	CWS Logistics Ltd. (Winnipeg)	Warehouse Managers Office
5	CWS Logistics Ltd. (Winnipeg)	Warehouse ER Response Kit
6	Fire Prevention Officer	Fire Prevention Branch Winnipeg, MB
7	Fire Department	Fire Hall 22 1567 Waverley Winnipeg, MB
8	Shawn Bergen	#10 – 75 Scurfield Blvd Winnipeg, MB
9	Product Manager	Monsanto Canada Inc. 900 – One Research Road Winnipeg, MB R3T 6E2
10	Safety Manager	Cargill Ltd 300-240 Graham Ave Winnipeg MB R3C 4C5

CHEMICAL LIST

The following **CHEMICAL LIST** are possible products stored in the facility.

Note: The quantities are estimated amounts and may vary slightly depending on the agricultural season.

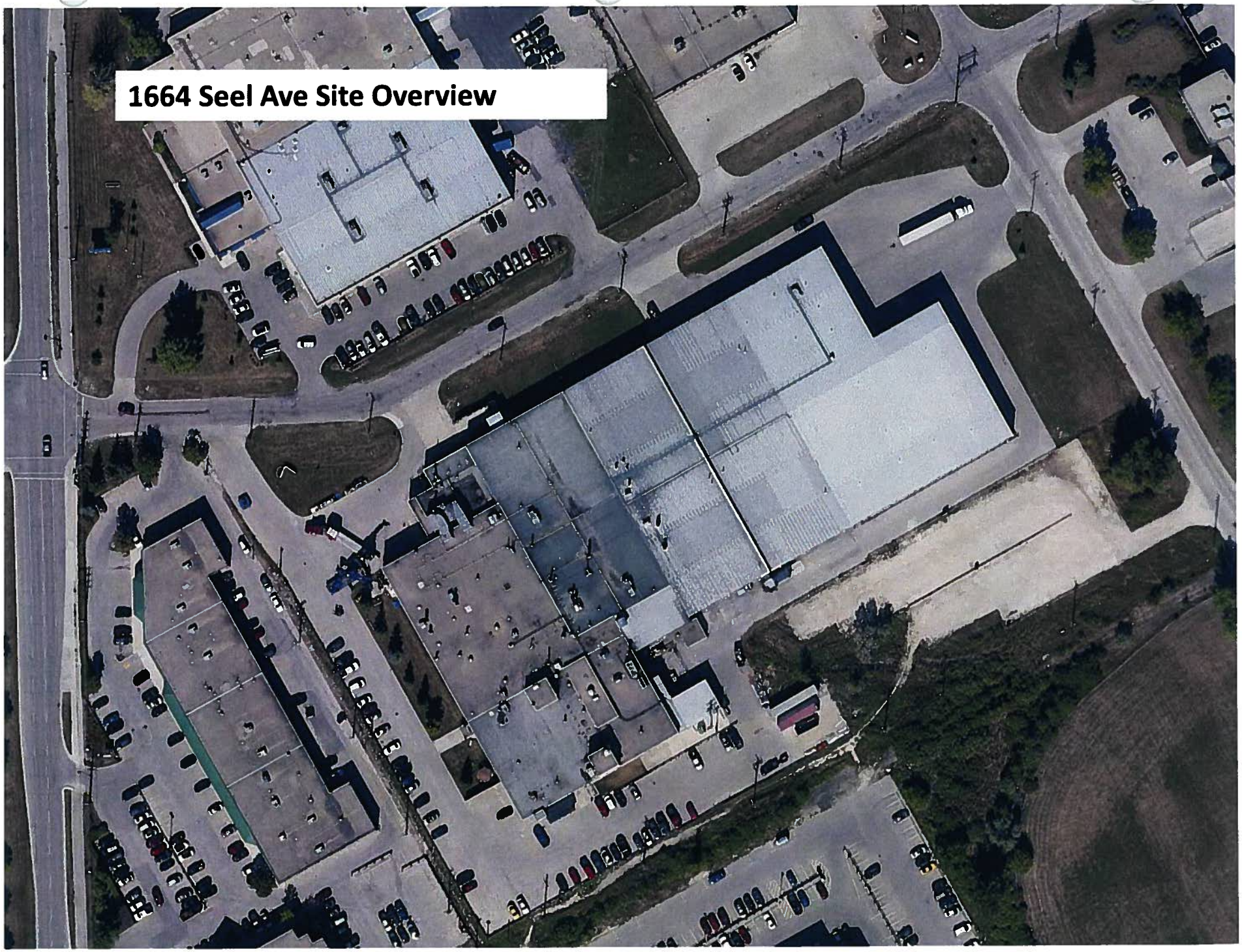
EMPTY CONTAINER CONSTRUCTION

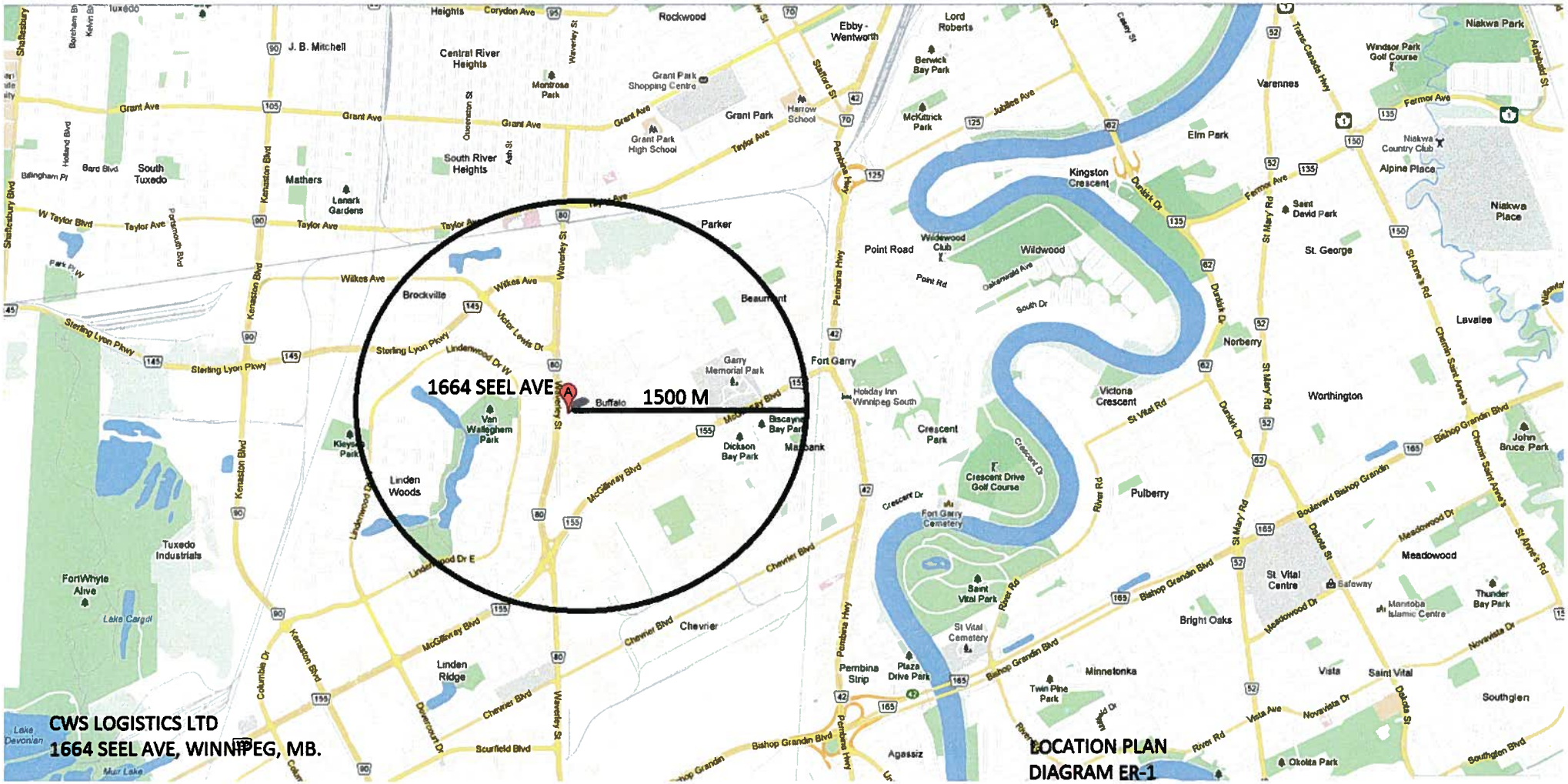
115 & 450 Liter totes - High Density Polyethylene – Cheminova

1000 Liter Schutz totes – Cheminova

10 Liter containers – New high density polyethylene

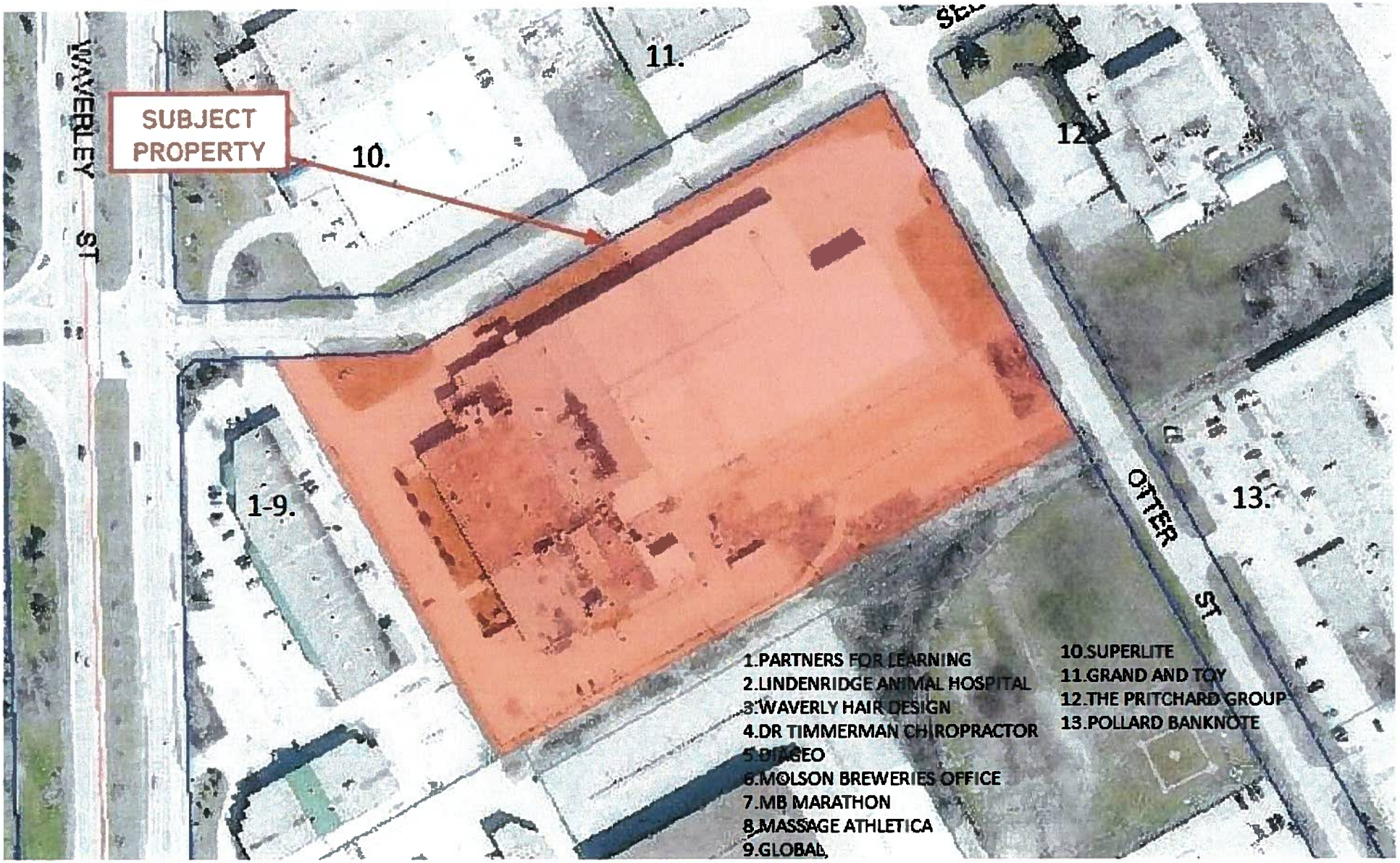
DIAGRAMS


1664 Seel Ave Site Overview



CWS LOGISTICS LTD
1664 SEEL AVE, WINNIPEG, MB.

LOCATION PLAN
DIAGRAM ER-1

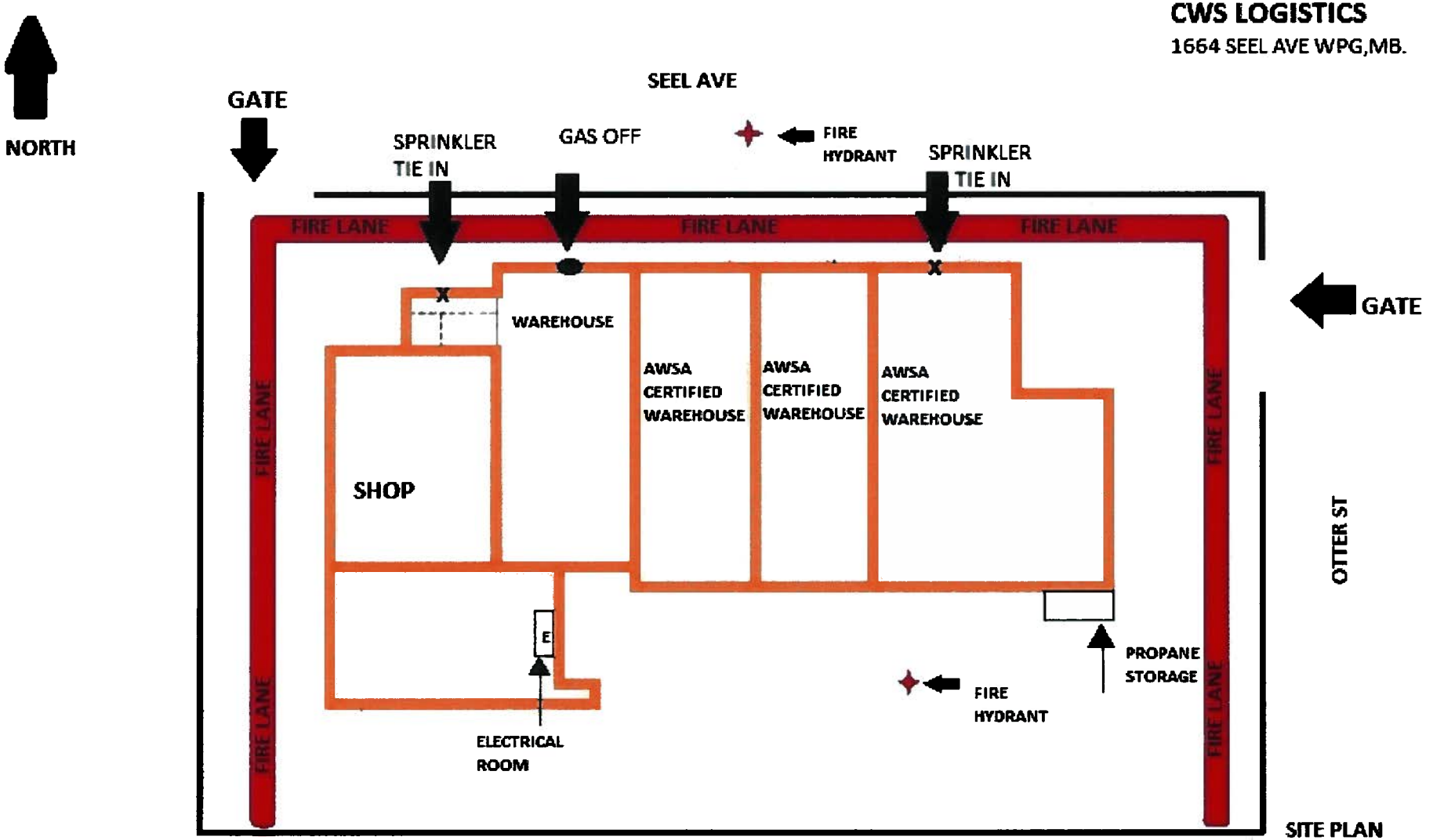


CWS LOGISTICS LTD
1664 SEEL AVE WINNIPEG,MB.

NEIGHBORHOOD WARNING PLAN

ER-2

CWS LOGISTICS
1664 SEEL AVE WPG,MB.



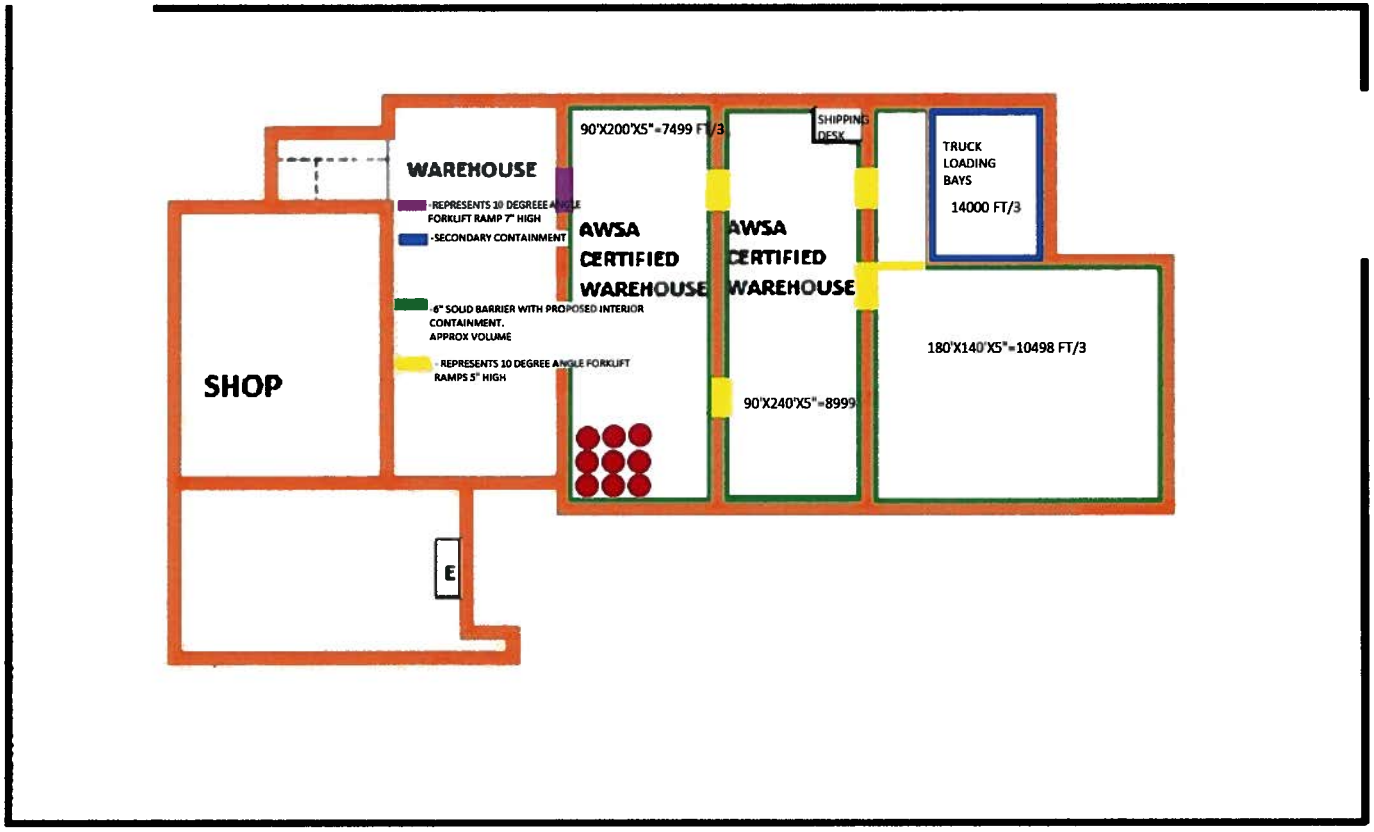
SITE PLAN
DIAGRAM ER-3

CWS LOGISTICS

1664 SEEL AVE WPG,MB.

NORTH

SEEL AVE

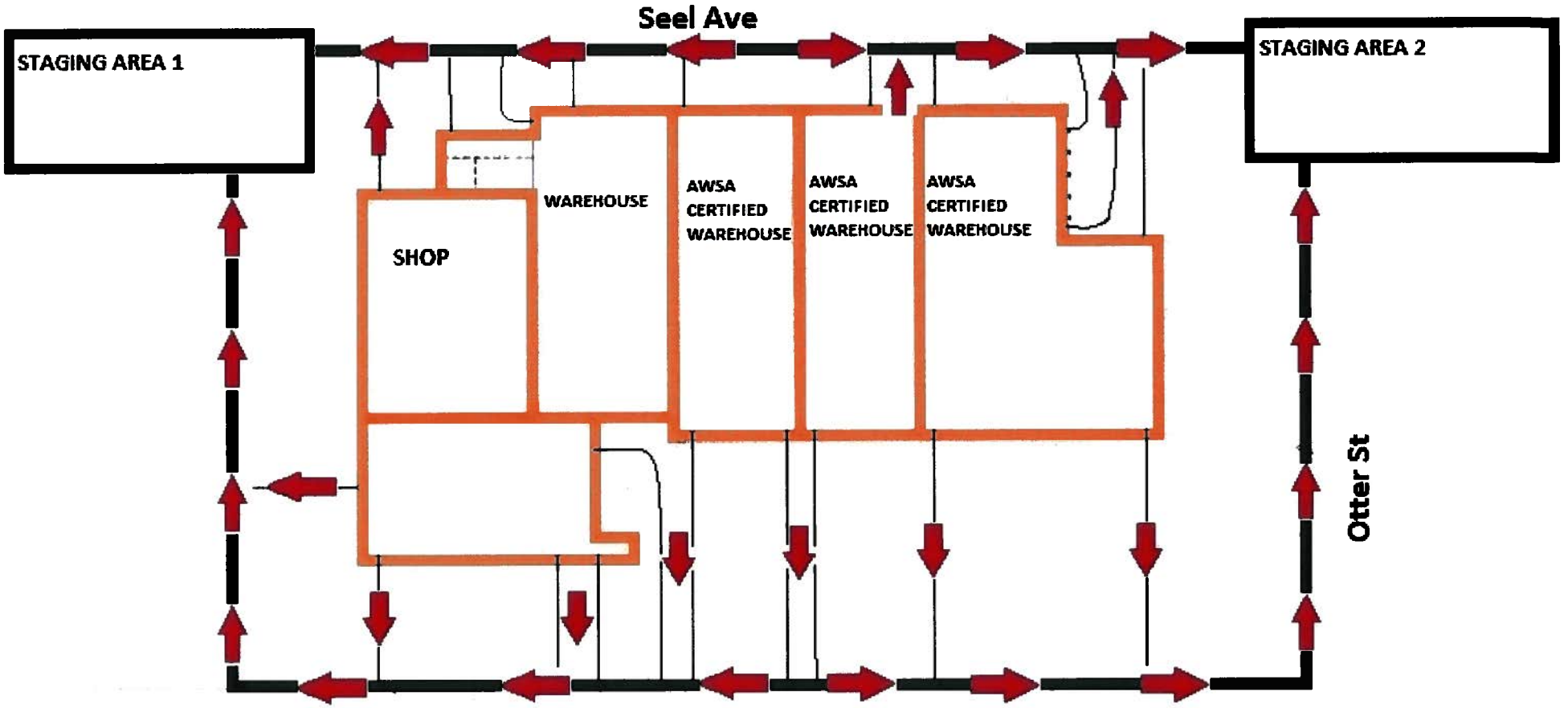


INTERIOR CONTAINMENT
ER-4

CWS LOGISTICS LTD
1664 SEEL AVE, WINNIPEG,MB

EMPLOYEE RESPONSIBILITY AT TIME OF EMERGENCY

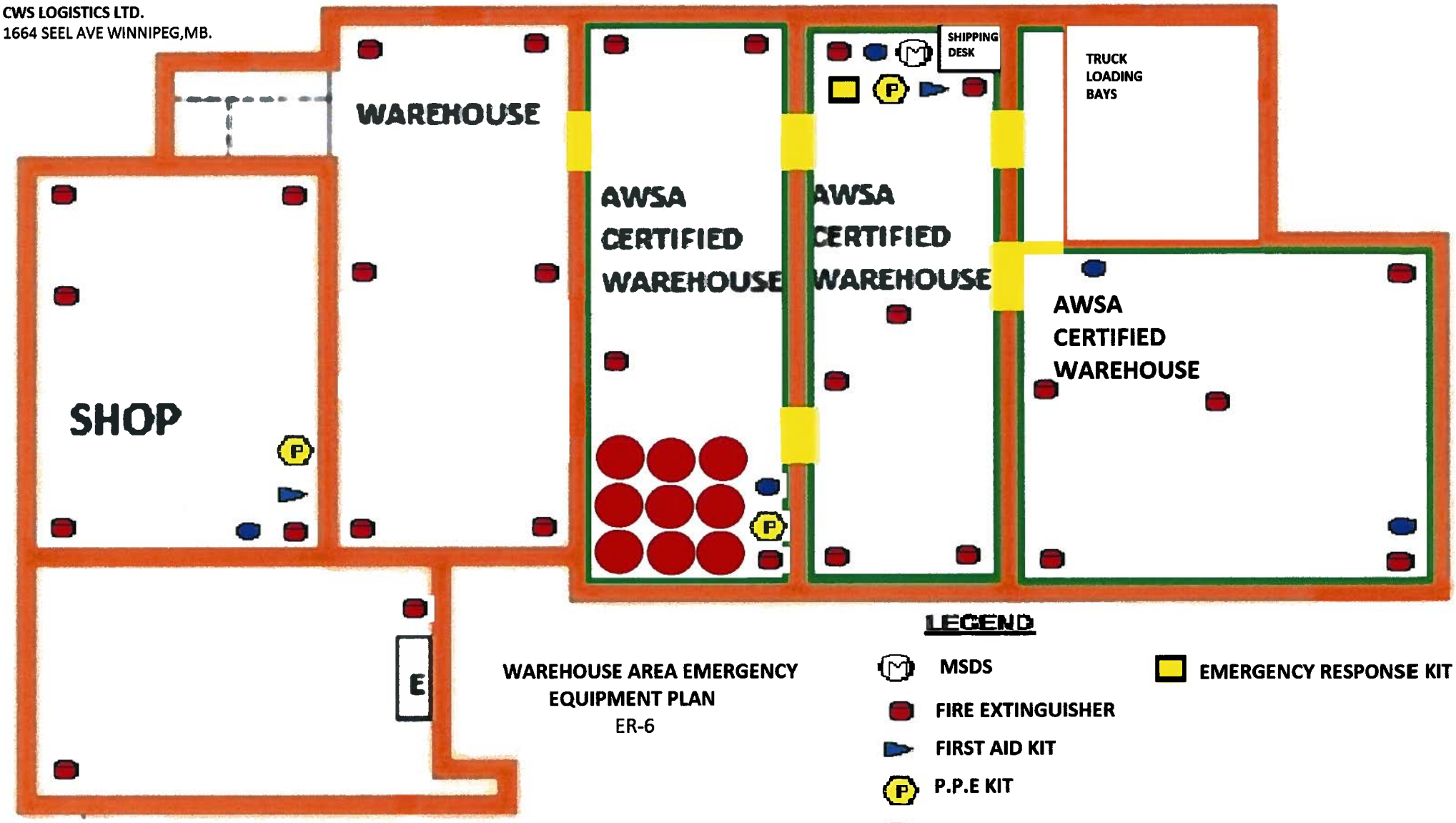
1. DON'T PANIC.
2. IF THE EMERGENCY SITUATION PERMITS, THE EMPLOYEES WITH DESIGNATED TASKS DURING THE EMERGENCY SHOULD ATTEMPT TO COMPLETE THE TASKS.
3. PROCEED CALMLY TO THE NEAREST EXIT.
4. MEET AT STAGING AREA FOR HEADCOUNT.



EMPLOYEES ARE TO REMAIN AT STAGING AREA
UNTIL FURTHER GUIDANCE FROM THE FIRE DEPARTMENT
OR ONSITE EMERGENCY RESPONSE COORDINATOR

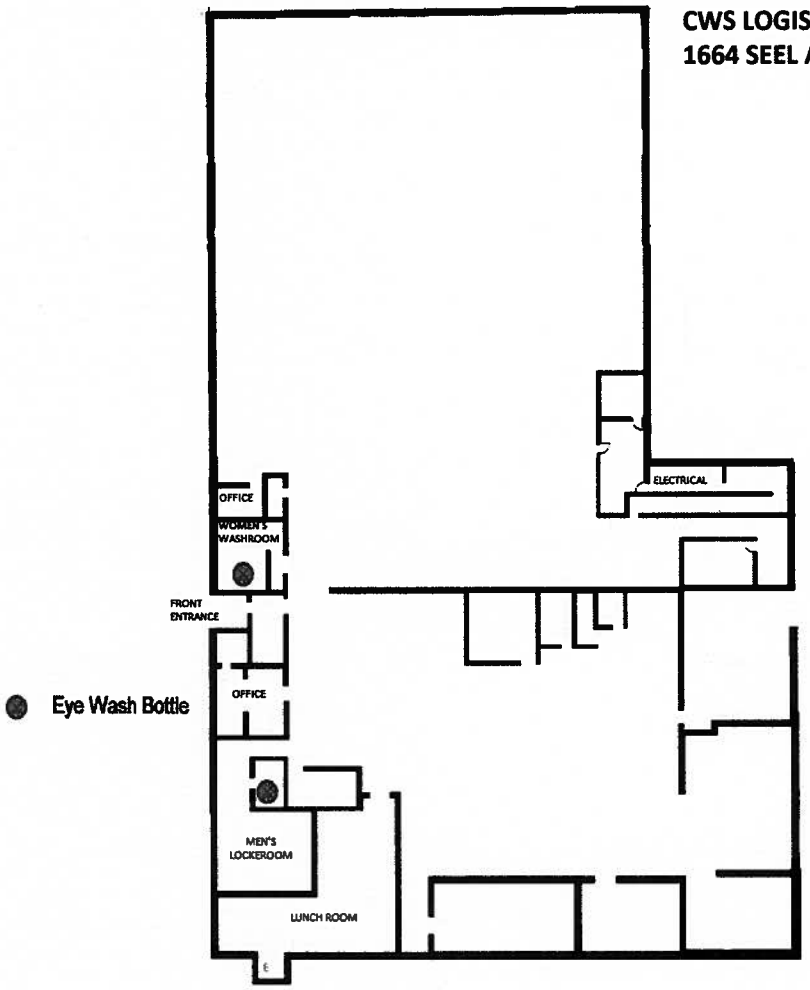
FACILITY EVACUATION ROUTES
DIAGRAM ER-5

CWS LOGISTICS LTD.
1664 SEEL AVE WINNIPEG,MB.



WAREHOUSE AREA EMERGENCY EQUIPMENT PLAN
ER-6

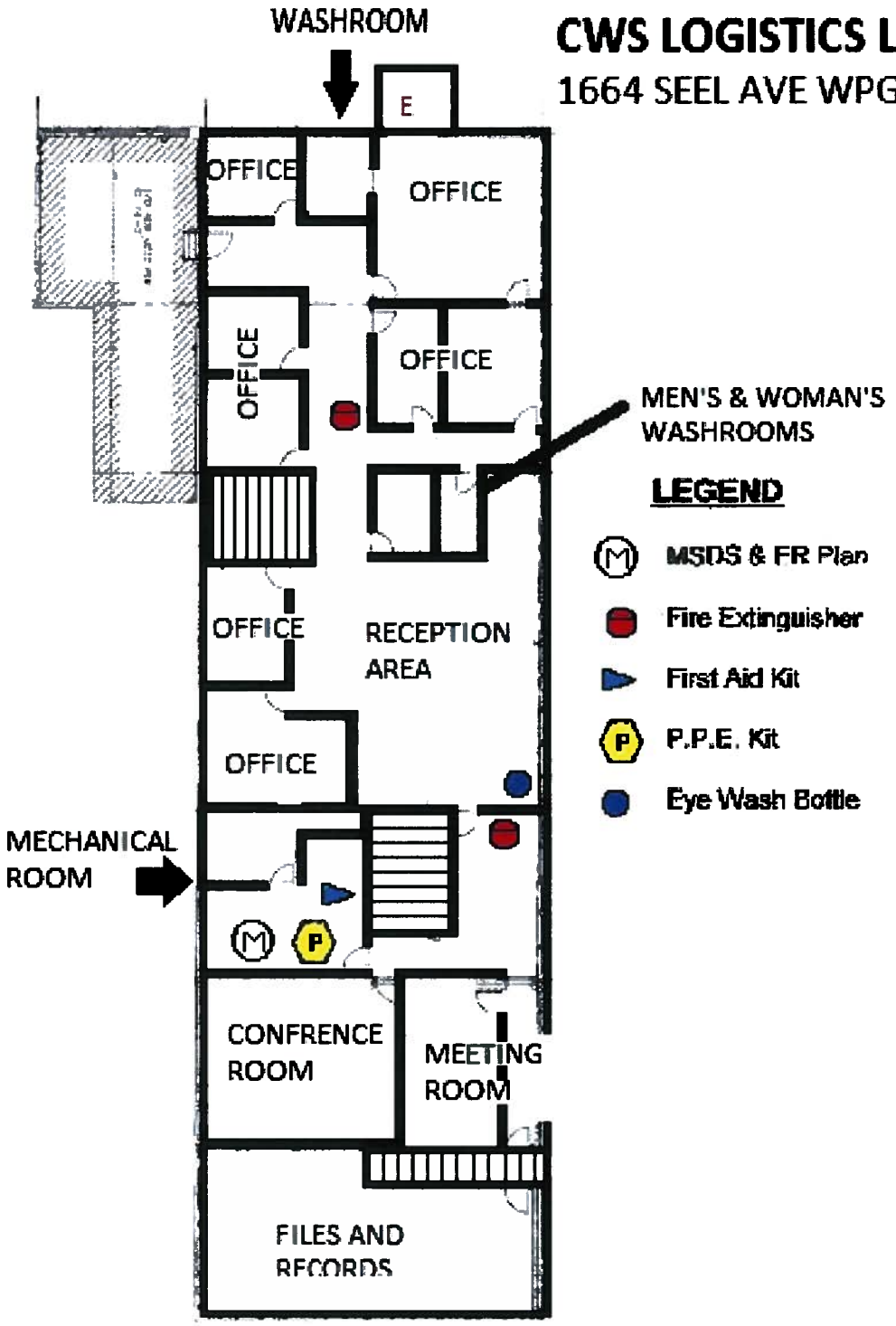
CWS LOGISTICS LTD
1664 SEEL AVE WINNIPEG,MB.



OFFICE AREA EMERGENCY EQUIPMENT PLAN
ER-7a

CWS LOGISTICS LTD

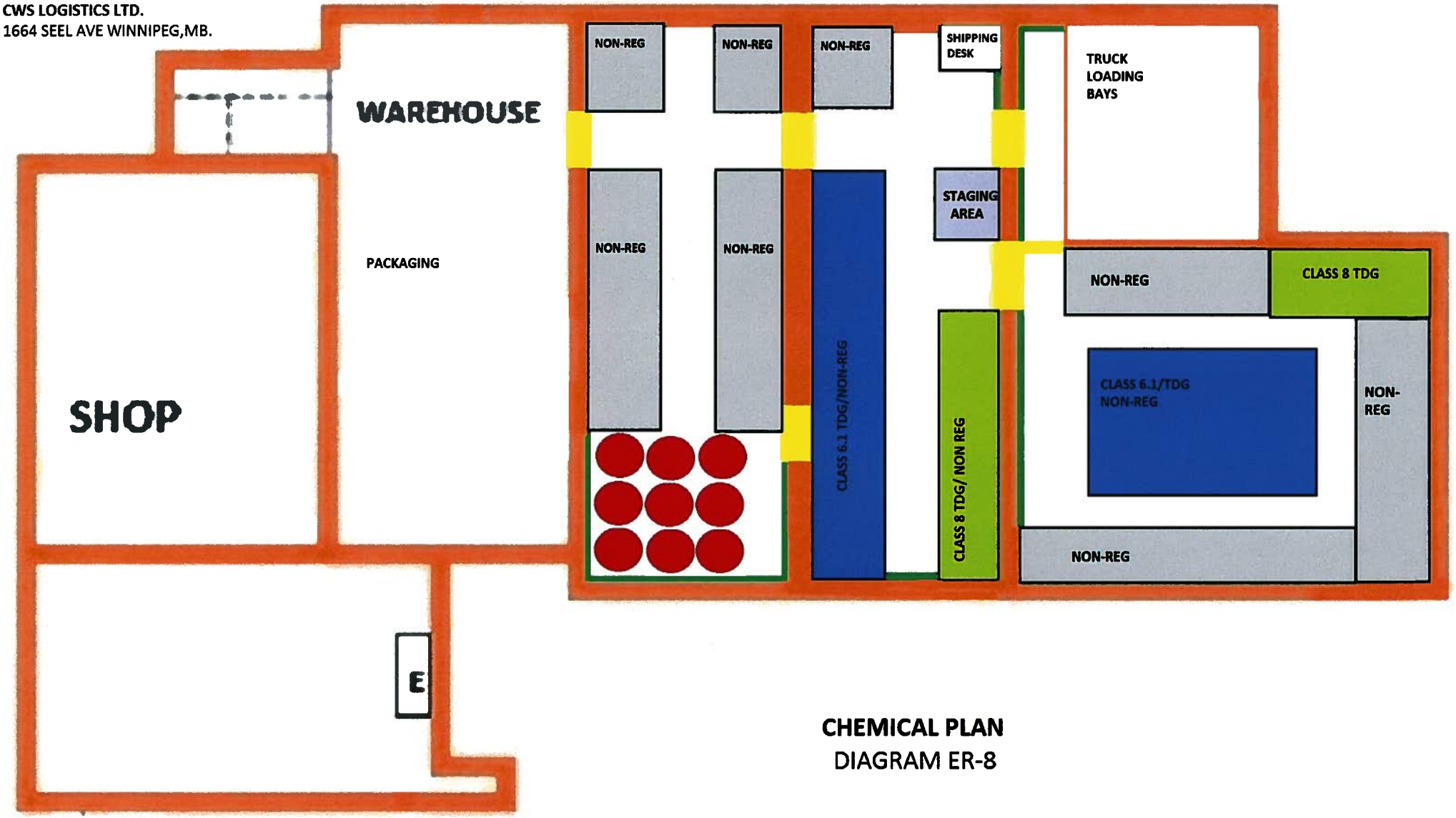
1664 SEEL AVE WPG,MB.



OFFICE AREA EMERGENCY EQUIPMENT PLAN
MEZZANINE LEVEL

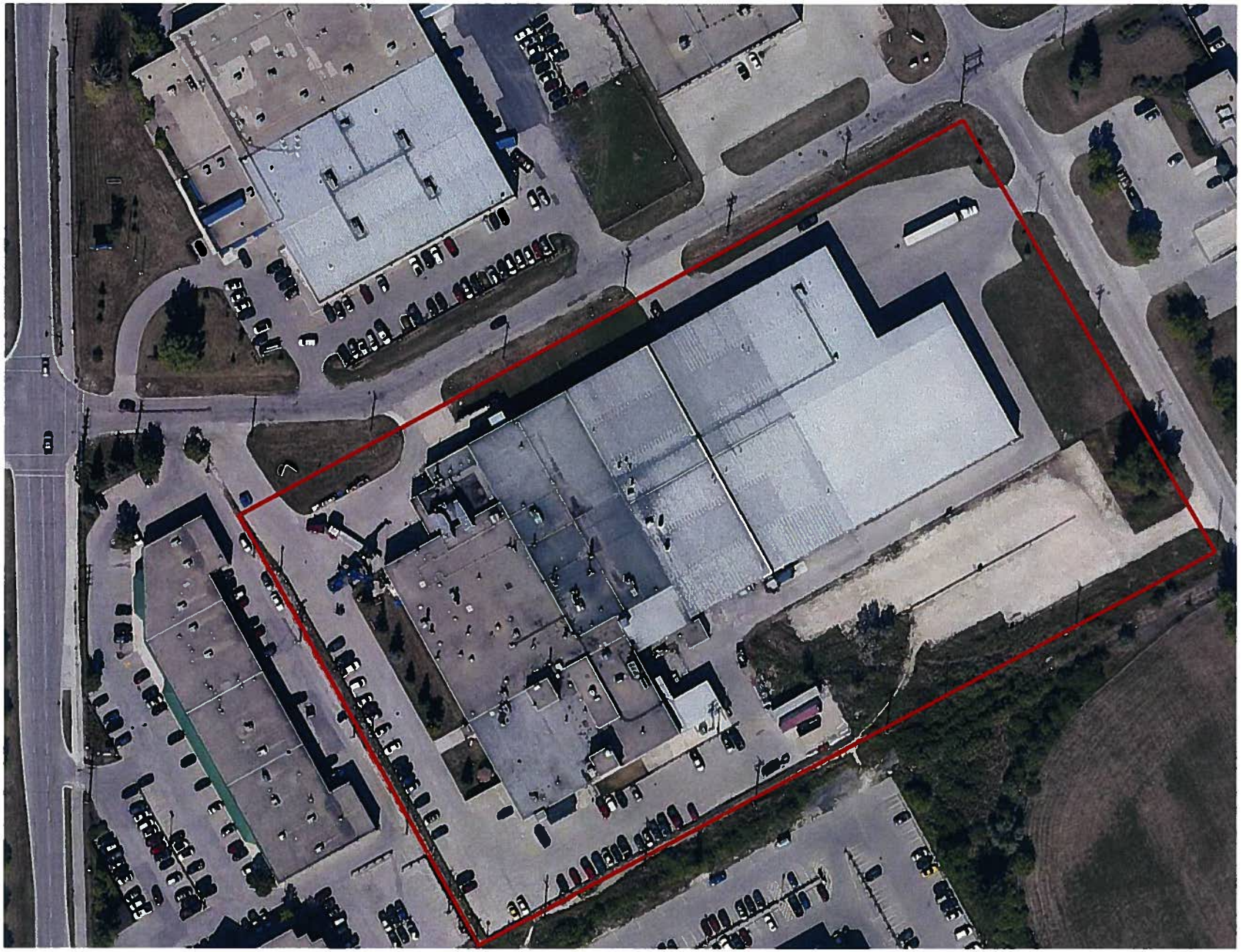
DIAGRAM ER-7b

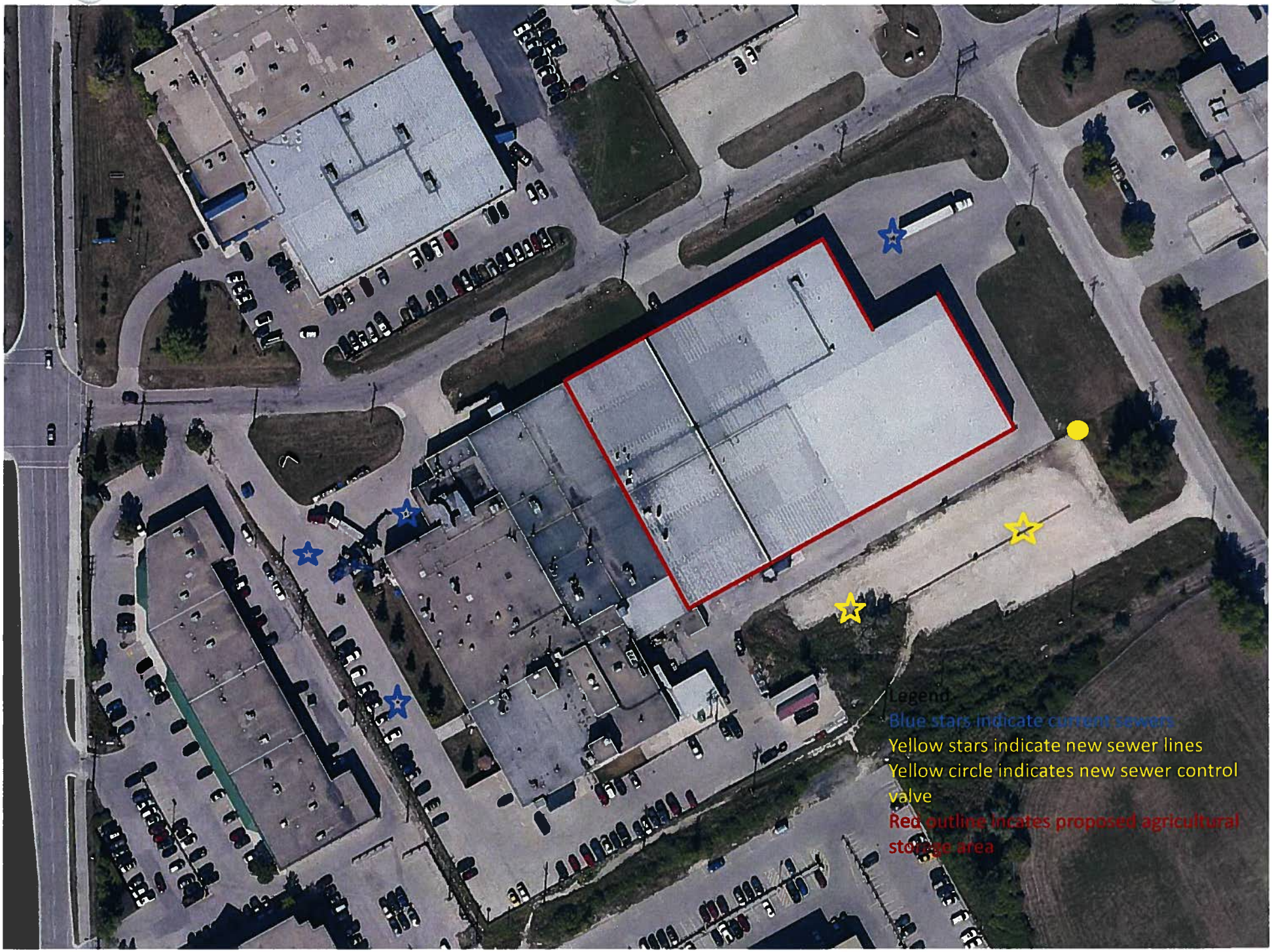
CWS LOGISTICS LTD.
1664 SEEL AVE WINNIPEG,MB.



CHEMICAL PLAN
DIAGRAM ER-8

1664 Seel Ave. Security Fence layout




Legend
Blue stars indicate current sewers
Yellow stars indicate new sewer lines
Yellow circle indicates new sewer control valve
Red outline incates proposed agricultural storage area

FIRE DEPARTMENT SIGN OFF

(Call Fire Prevention Officer to set up a visit (204) 986-6358)

Record Purposes

Signature of the document indicates the local fire department has:

1. Visited the site

2. Received a copy of the Emergency Response Plan dated _____

3. Received a copy of the total potential inventory of all crop protection products found in this Emergency Response Plan

The Emergency Response Team at has studied the Emergency Response Plan for

CWS Logistics Ltd.
1664 Seel Ave.
Winnipeg, MB

and each member of the team has access to a copy.

The completion of the study was on

_____

The Emergency Response Plan was reviewed with the local Fire Official who has signed that he has received the copy and has visited the site.

Sign: _____
FIRE DEPARTMENT OFFICIAL

Date: _____

Sign: _____
MANAGER

Date: _____

CHECKLISTS

BOMB THREAT CHECKLIST

RELEASE/SPILL REPORT FORM

MEDIA STANDBY QUESTIONS AND ANSWERS

BOMB THREAT CHECKLIST

1. If possible, have another person monitor call.

2. Keep caller on the line and talking as long as possible.

3. Time call received: _____

   Date: _____

4. Exact words of caller: _____

   _____

   _____

5. Questions to ask:
   a) Time bomb will explode _____
   b) Location or area of bomb _____
   c) Why was bomb placed _____
   d) What kind of bomb _____
   e) What does bomb look like _____
   f) Name of caller _____

6. Voice identity:
   Sex: ___ M ____ F Cultured _____
   Noticeable Accent _____
   Irrational _____
   Intoxicated _____
   Is voice familiar? _____
   If so, who did it sound like _____

7. Background noises:
   Music _____ Street Traffic _____
   Trains or Subway _____
   Voices _____
   Machinery _____
   Other _____

8. Time caller hung up _____

9. Name of person receiving call _____ Position _____

RELEASE / SPILL REPORT FORM

1. Report to the appropriate authority made by:

   Name: _____ Signature: _____

   Title: _____ Location: _____

   Date: _____ Time: _____

2. Name(s) and estimated amount(s) of substance(s) including hazard classification per WHMIS: _____

3. Geographical location of release: _____

4. Listing used to classify material released as hazardous (e.g. TDG Act etc.)

   _____

5. The reportable quantity(ies) for substance(s) involved: _____

   _____

6. Release was to (air, ground, water): _____

7. Date, time, and duration of release: _____

8. Remedial actions taken to control, and/or mitigate the effects of the release:

   _____

   _____

9. Name, title and phone number of person to whom report was made:

   _____

10. Other regulatory groups contacted if required:

    _____ Date & Time: _____

    _____ Date & Time: _____

Approved: _____ Date: _____
Location Emergency Response Coordinator

Approved: _____ Date: _____
Location Manager

MEDIA STANDBY QUESTIONS AND ANSWERS

What happened and when? _____

Where did the incident occur (on-site, off-site, etc?)? _____

Quantity involved (large, small duration of discharge, etc?) _____

Direction of movement and toward (river, community, etc?) _____

Degree of public health hazards, if any? _____

Injuries, if any (personnel, public?) _____

Hospitalizations: _____

Any roads closed, etc? _____

Agencies informed? _____

What's being done (can we say a trained response team has repaired or is correcting the situation, has contained and removed all hazards, etc?) _____

Are work stoppages expected? _____

Should public be advised to take any special actions for protection? _____

Have similar incidents been reported in the press? If so, review details before talking to the press if possible. _____

APPENDIX F

FIRE SAFETY PLAN

Fire Safety Plan

CWS Logistics Ltd.
1664 Seel Ave.
Winnipeg, MB.
R3T 4J7

Prepared By:
Greg Elias
CWS Logistics Ltd
Winnipeg, MB
September, 2012

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1. BUILDING DESCRIPTION AND USE

WAREHOUSE OWNERSHIP AND LOCATION DETAILS
Street Address:
The warehouse building known as 1664 Seel Ave. Winnipeg, Manitoba. R3T 4J7

Legal Description:
Lot 1 Plan 23262 Lot 7/10 ST. B

Ownership
The building is owned by CWS Logistics Ltd.

Current Zoning:
Located in the heart of the Fort Garry Industrial Park the warehouse is Zoned M2,
Zoning District: Manufacturing – General
Description: Intended to provide light manufacturing, processing, service, storage, wholesale, and distribution operations, with some limited outdoor operations and storage

BUILDING DESCRIPTION:
CWS Logistics Ltd
1664 Seel Ave. Winnipeg

Total Building (145442 SF)
The building is a combination of concrete masonry block exterior walls and steel framed construction situated on a piled slab on grade foundation. The roof structure is a combination of flat roof covered with tar and gravel and a steel structure that is slightly pitched in newer areas.
The Sprinkler System is supplemented with standpipe fire hoses

There is a two story structure inside the building.
The main floor houses the washrooms, lunchroom and electrical room.
The second level is office area.

Building use:
Currently the building is vacant. It was a plastic manufacturing company. CWS will be using it for Agriculture Chemical. The terminal and cross dock facility will operate the same as their current location on Clarence Ave.

2. FIRE PROTECTION SYSTEM AND EQUIPMENT

FIRE DEPARTMENT ACCESS:
There are two accesses to the parking lot off of Seel Ave. and one access off of Otter St.

All entrances into the main yard of CWS Logistics will be fenced and gated. There will be one gate off of Seel Ave. and the one gate off of Otter St. which will be open during normal buisness hours of Monday to Friday 7am – 5pm.

Outside of these hours the gates are locked for security reasons.

All onsite Emergency Coordinators have keys for all locks.

Main access to the building is through the front exits on the west side. The secondary acess would be through the man door on the East side.

All offsite Emergency Responders have full authorization to shear locks and break down doors to gain entry and respond to an emergency.

EMERGENCY POWER:
None

EMERGENCY LIGHTING:
There is currently Emergency lighting located at each of the Emergency Exits and throughout the warehouse. These are battery operated systems that come on in the event of a power outage.

Emergency response kits have flashlights to aid in evacuation.

EXITS:
There are 22 main fire exits located all around the buiding.

FIRE ALARM SYSTEM:
Fire alarm for the sprinkler system is monitored 24 hours by ProTelec Alarms. Verbal commands will be issued int he event of an emergency during working hours.

PORTABLE FIRE EXTINGUISHERS:
Portable fire extingushers are located around the floor of the warehouse.
A properly secured fire extingusher is installed on all forklifts.

HEATING, VENTILATION AND AIR CONDITIONING:

Warehouse:
Roof Mounted heaters throughout the building

Office:
Gas Forced air furnace and air conditioning located on the second level of the office sturcture.

SMOKE ALARMS:
None

SPECIAL EXTINGUISHING SYSTEM:
None

FIRE PUMPS:
None

WATER SUPPLY:
There are (2) Sprinkler tie in located on the North side of the building.

There are two fire hydrants one located on Seel Ave. and one on in the parking lot on the south side of the building.

AUTOMATIC SPRINKLER SYSTEM:
The Sprinkler system is Supplemented with standpipe fires hoses

The system is monitored 24 hours by Pro Telec Alarms (204) 949-1415

The system is maintained and tested by Vipond Inc. (204) 783-2420

3. FLOOR PLANS

All floor plans are located in the Appendix.

Site Map – Engineered Drawing
Site Map – Equipment Layout
Facility Evacuation Routes
Warehouse Evacuation Plan
Office Area Evacuation Plan – Main Level
Warehouse Area Emergency Equipment Plan
Office Area Emergency Equipment Plan – Main Level
Racking and Chemical Plan

4. HUMAN RESOURCES

CWS EMERGENCY RESPONSE ORGANIZATIONAL CHART

ER Coordinator

Name	Greg Elias - CWS Logistics Ltd.
Title	Facility Manager – Winnipeg
Work	(204) 453-2261
Portable	(204) 999-9908

CWS Alternate # 1

Name	Mark Paziuk – CWS Logistics
Title	Transportation Manager -Winnipeg
Work	(204) 453–2261
Portable	(204) 223-1631

OFFSITE EMERGENCY RESPONSE PERSONNEL

Fire Fighters and Hazardous Chemical Squad (Emergency Response Coordinator)	City of Winnipeg Headquarters Switchboard Fire Prevention	911 (204) 986-6380 (204) 986-6358
Medical Support	Poison Control Center Victoria General Hospital (Emergency) 2340 Pembina Highway	(204) 787-2591 (204) 477-3121
Manitoba Environmental Officers	Winnipeg Environment Spill Report Center	(204) 945-4888
Police and Bomb Squad Experts	City of Winnipeg	911
Hazardous Waste	Hazardous Waste Services	(204) 945-0992
Utilities Emergency Response	Power Natural Gas Water & Waste	(204) 480-5900 (204) 480-1212 (204) 986-5858

5. ROLES & RESPONSIBILITIES

CWS ONSITE PERSONNEL RESPONSIBILITIES

Emergency Response Coordinator	**Greg Elias** Alternate #1: Mark Paziuk
Initial Communication	Fire Alarm, Radio Communication or by Voice Command
First Aid & CPR	Refer to posted list in First Aid Room and Alternate Offsite Emergency Responders
Traffic Control	**Kirt Rickman**
Evacuation of personnel not employed by CWS Logistics Ltd.	**Greg Elias** Alternate #1: Mark Paziuk Alternate #2: Jeff Kipling

RESPONSIBILITIES OF EMERGENCY RESPONSE COORDINATOR

1. Assumes total control over site activities; and has authority to direct CWS Logistics Ltd's response operations until the appropriate offsite personnel arrive.
2. Dial 911 or designate someone to call 911.
3. Assess the situation and decide whether or not to evacuate all personnel.
4. Initiate the Neighbourhood Warning Plan.
5. Enforces the safety procedures during the emergency.
6. Briefs the field teams on their specific assignments.
7. Documents field activities and sample collections.

8. Provide information to the Fire Department - offsite emergency response coordinator:
   a) On the hazards and harmful effects of specific chemicals - material safety data sheets are to be made available at the command center;
   b) On the characteristics of specific containers;
   c) On potential response options for specific chemicals.

9. Notifies emergency response personnel by telephone or radio in the event of an emergency.

10. Maintains a log of communication and site activities.

11. Maintains line-of-site and communication contact with the work parties via radios, cellular or other means.

12. Provide adequate guidance and instruction to relocate employees to the designated assembly points.

13. Ensure all employees are accounted for by doing a head count at the designated assembly point.

14. Prepares the final report and support files on the response activities.

Assessing the Emergency

The Emergency Response Coordinator will assess the situation once the initial communication has been announced; and decide whether or not to evacuate all personnel.

a) The emergency must be evaluated quickly and the proper resources must be called. It is important to try not to over-react but it is still better to over-react than to fall short in our response. The nature and extent of the problem must be evaluated, it's potential to escalate, the risk of significant damage to and its impact on people, property and the environment must be considered.

b) Once an assessment is made, there are only two (2) choices:

EVACUATE OR ATTEMPT TO HANDLE THE SITUATION?

1. **Handle the Situation:**
   a) If the decision is made to control the situation locally, the ER Coordinator takes full control and will initiate the Fire Plan.
2. **Evacuation:**
   a) If evacuation is the decision, then the ER Coordinator will carry out his / her responsibilities.

b) Instruct all employees of their ER responsibilities and contact those not present at the time of the incident that their duties will be fulfilled by an alternate.
c) Initiate the Neighbourhood Warning Plan.

NEIGHBORHOOD WARNING PLAN

1. All businesses within the 100-meter radius of CWS Logistics Ltd. facility will be notified with any possible situation that may affect their operation.

2. A phone call will be made by CWS Logistics Ltd. regarding a possible emergency situation.

3. **The following is a list of businesses within the 100-meter radius:**

A.	Superlite Floor Show	(204) 989-7277
B.	Grand & Toy	(204) 284-1500
C.	The Pritchard Group	(204) 474-5909
D.	Pollard Banknote	(204) 474-2323
E.	Partners for Learning	(204) 284-2255
F.	Lindenridge Animal Hosp.	(204) 453-3221
G.	Waverley Hair Design	(204) 478-0555
H.	Dr. Timmerman Chiropractor	(204) 474-1159
I.	Diageo	(204) 453-7447
J.	Molson Breweries	(204) 475-1786
K.	MB. Marathon	(204) 415-4517
L.	Massage Athletica	(204) 781-4073
M.	Global	(204) 925-3350

The alarm message is as follows:

This is to advise that CWS Logistics Ltd. is experiencing a problem at its site located at 1664 Seel Ave. in Winnipeg. Please call ___XXX____, (give ER coordinators cell number), identify your company, and further information will be provided.

INITIAL COMMUNICATION

1. In all aspects of emergency situations, if the alarm does not sound, direct voice communication shall be made.

2. Any member of the warehouse crew available at the time of the emergency shall contact office personnel by phone, radio or otherwise.

3. When the alarm goes off, the following emergency plan should be followed:

   a) Please refer to the map for emergency evacuation stating exits and escape routes.

   b) Under no circumstances, after evacuation, should any employee return to the building for personal belongings.

   Preservation of Human Life Is the Prime Consideration

4. The fire alarm must be activated in any of the following situations:

   a) Fire - any sign of smoke or flame.

   b) Explosion - with which there is always a high likelihood of a subsequent fire, and the possibility of escape of toxic gases and of personal injury.

   c) Escape of hazardous materials (liquid, gas, solids, or unusual odor) - when judged by those present as being a concern or threat to those in the immediate area, in other parts of the plan site, or in neighbouring areas outside the plant.

   d) Serious injuries or fatalities.

   e) Natural disasters, threats or external accidents, when judged by those present as being an immediate hazard or concern to personnel or operations.

5. The individual who activates the alarm will then announce the location and nature of the emergency in a loud verbal manner.

6. Repeat the emergency announcement until the Emergency Response Coordinator acknowledges receipt of the message.

7. Initiate the Neighbourhood Warning Plan.

FIRST AID AND CPR

1. Please note: - First Aid & CPR trained responders should be contacted immediately.

2. Rescue operations should be done exceedingly carefully and using "common sense". All personnel trained in the St. John's Ambulance First Aid course will be assigned to medical duties until the ambulance team arrives. No one should take unnecessary risks!

TRAFFIC CONTROL

1. Traffic control will be required until the police arrive.
2. All incoming vehicles, with the exception of Offsite Emergency Responders, should be turned away.
3. Stand in the middle of road to direct traffic - do not position yourself on the road where you could sustain injury by a vehicle. WATCH FOR TRAFFIC.

EQUIPMENT SHUTOFF

1. Follow the standard operating procedures (SOP) to shut off equipment at time of an emergency.

EVACUATION OF PERSONNEL

NOT Employed By CWS Logistics Ltd.

1. Any other people on the premises not employed with CWS Logistics Ltd. should be immediately evacuated from the building and completely off the grounds.

2. Depending on the situation the ER Coordinator may instruct trucks to be removed from the Loading area. It will be the responsibility of the Transport Companies' driver to remove the vehicle safely from the building. The Evacuation office will assist the drivers as long as it is safe to do so. Reminder: Property can be replaced, human life cannot.

3. Report to the ER Coordinator the number of vehicles that have been evacuated, the drivers and their vehicles that have remained on site.

4. Escort the drivers to the Initial Employee Assembly Points.

Employed By CWS Logistics Ltd

1. If on a forklift when an initial communication is sounded - park forklift away from any exit aisle. Lower forks, turn lights on and turn engines off, turn off propane.

2. Remove radio and flashlight from forklift and carry to assembly point.

3. If the emergency situation permits, the employees with designated responsibilities, inside the building, should attempt to complete their emergency response tasks during an emergency.

4. Proceed to the nearest exit and evacuate the building and proceed directly to the assembly point.

5. Any employees who are not in the building should NOT re-enter upon alarm initiation.

REMOVAL OF MSDS AND ER DOCUMENTS

1. ER Coordinator will delegate an employee to take copy of MSDS book and Emergency Response Plan to the assembly point.

Assembly Points

1. As designated on the Facility Evacuation Routes Plan. Once the head count has been completed the ER Coordinator or Offsite ER Coordinator will relocate employees away from the site.

2. The ER Coordinator will make arrangements with a local taxi company to pick up employees at a designated area and take them home.

Duffy's	(204) 925-0101
Unicity	(204) 925-3131

3. Employees are not to stop to remove vehicles.

AFTER HOURS EMERGENCY PROCEDURE

In the event of an after-hours emergency incident, our 24-hour fire detection and monitoring company, Pro TELEC Alarms, will phone a list of employees as follows:

Name	**Cellular**
Greg Elias	(204) 999-9908
Mark Paziuk	(204) 223-1631

Pro TELEC Alarms is also responsible for calling authorities in the event their monitors signal an alarm.

Pro TELEC Alarms will contact the Fire Department First if a fire alarm sounds.
Greg Elias will be notified next.

The person who gets the call from Pro TELEC Alarms will indicate to the others down the line that he is the initial caller so we know where the list ends.

Each member on this list will have a copy of these procedures. Once the first person arrives on the scene, he / she will let authorities on the grounds if they are not already. He / she will then use his / her Emergency Response Plan to assist authorities in every way possible.

Also, the first person on the scene will become the Emergency Response Coordinator until the designated Emergency Response Coordinator arrives on the scene at which time he will take over after being fully informed by all employees who are already on the scene.

Pro TELEC Alarms:	Ph: (204) 949-1417
Simplex Grinnell:	Ph: (204) 694-0140

6. ADDITIONAL REQUIREMENTS

STORAGE OF CHEMICALS IN A SPRINKLERED WAREHOUSE

Refer to the CWS Logistics Standard Operating Manual – Warehousing Operations and Training

PROCEDURE OUTLINE
This procedure is to provide a Warehouse Operator with the basic understanding of the National Fire Code regulations governing the storage of chemicals.

Maintaining clearances and required aisles in the warehouse
Sorting Products according to flash points
Using an MSDS to determine the National Fire Code class
Using an MSDS to determine a Transportation of Dangerous Goods Class
Sorting Products into Individual Storage Units (ISA's).

LEGEND

AWSA Agrichemical Warehousing Standards Association (formerly CPIC)
ISA Individual Storage Area
MSDS Material Safety Data Sheet
NFC National Fire Code
TDG Transportation of Dangerous Goods

This procedure is an interpretation of the National Fire Code Regulations on the storage of chemicals in a warehouse. It is the National Fire Code (NFC) or Provincial Fire Code which dictates how you store product in a chemical warehouse. "The final responsibility for an official interpretation rests with the authority having jurisdiction." (NRC-CNRC Denis Bergeron)

Major differences between AWSA Protocols and the National Fire Code Regulations for the storage of chemicals in the warehouse:

Storage Item	AWSA	National Fire Code*
Segregation of Flammable and Combustible Liquids from: Dangerous goods having a flash point at or above 93.3 C	Flammable and Combustible Liquids must be in their own ISA 2.4m away from these products	Flammable and Combustible Liquids must be separated by NFC Table 3.2.7.6. - may be same ISA.
Segregation of Flammable and Combustible Liquids from: Non regulated products - granular	Flammable and Combustible Liquids must be in their own ISA 2.4m away from these products	Flammable and Combustible Liquids may be stored beside granular in the same ISA provided the non-regulated granular do not create any dangerous substances when mixed with the liquids or when burnt.
Segregation of Flammable and Combustible Liquids from: Non regulated products - liquids	Flammable and Combustible Liquids must be in their own ISA 2.4m away from these products	Flammable and Combustible Liquids may be stored in the same ISA provided these products are considered a Class I or II commodity under the NFC.

*Refer to the attached written operating procedure for the complete explanation of how to store in accordance with National Fire Code.

The above NFC information was discussed at the recent National Fire Code Council Standing Committee Meeting.

Even though the AWASA audit protocols do not monitor all of the aspects in the NFC for the storage of product, a warehouse operator must not forget that the National Fire

Code or Provincial Fire Code having jurisdiction must be followed.

Some information in this Standard Operating Procedure has been taken from the National Fire Code of Canada 1995 prepared by the National Research Council of Canada and A Memorandum of Understanding for 1996 Audit Protocols C2, C3, C4, C5, C6 by AWSA.

The instructions contained in this operating procedure are not intended in any way to abrogate or derogate from requirements contained in industry, municipal, provincial or federal by-laws, regulations or legislation.

NFC CLASSIFICATION SYSTEM

FLAMMABLE LIQUIDS	
Class IA	liquids which shall include those having a flash point below 22.8°C and a boiling point below 37.8°C
Class IB	liquids which shall include those having a flash point below 22.8°C and a boiling point at or above 37.8°C
Class IC	liquids which shall include those having a flash point at or above 22.8°C and below 37.8°C

COMBUSTIBLE LIQUIDS	
Class II	liquids which shall include those having a flash point at or above 37.8°C and below 60°C
Class IIIA	liquids which shall include those having a flash point at or above 60°C and below 93.3°C

Definition: Flash point means the lowest temperature at which a product will give off enough vapour to catch fire if a source of ignition is present. The lower the flash point, the greater the potential fire hazard.

CLEARANCES WITHIN THE WAREHOUSE

Aisles	Minimum Width*
Emergency Equipment (Including fire extinguisher, hoses etc.)	1 m (3'-0")
Exit Doors	1 m (3'-0")
Between ISA (Individual Storage Areas)	2.4 m (8'-0")
Facility over 100 m^2 (1076 ft^2) in floor area - main aisle from front to back of facility	2.4 m (8'-0")
Facility under 100 m^2 (1076 ft^2) in floor area - main aisle from front to back of facility (unless used as an ISA separation)	1 m (3'-0")
* Minimum Width means clear and free of any obstructions - no product, debris, equipment etc.	

Clearances		Minimum Distances
From Walls:	Dangerous goods - when quantities stored in a building exceed the quantities shown on N.F.C. Table 3.2.7.1.	400 mm (16")
	Dangerous goods stored in a building that do not exceed quantities shown on N.F.C. Table 3.2.7.1	0 mm (0")
	Products that may swell or expand with absorption of water	600 mm (24")
	Pallets only one (1) deep	0 mm (0")
From Ceiling:	Top of storage to underside of floor or roof deck	1 m (3'-0")
From Heating Units:	Top of storage to bottom of heating unit Note: Refer to heating manufacturer's written instructions or the local authority having jurisdiction as they may be more stringent clearances. e.g. Black tube Radiant heaters require a minimum of 1.4 m (4'-6")	1 m (3'-0")

24 HOUR TELEPHONE NUMBERS

Below are the names of the Chemical Companies and their 24 hour numbers to be contacted in the event of an emergency.

CANUTEC 24 hour service call collect (613) 996-6666 CHEMTREC 1-800-424-9300	
* Below are 24 hour numbers unless indicated otherwise	
A- Z Chemicals (Chemtrade)	1-888-793-2378
Arvesta	1-800-424-3900
BASF Canada Inc.	1-800-454-2673
Bayer	1-514-697-5555
Cargill Limited - PSC Emergency Response	1-800-567-7455
Cheminova Canada	1-613-996-6666
Dow AgroSciences	1-519-339-3711
DuPont Canada Inc.	1-613-348-3616
Engage Agro	1-800-267-1373
Federated Cooperatives Ltd. (Regina)	1-306-721-5222
Interprovincial Cooperatives Ltd.	1-613-996-6666
James Richardson & Sons Limited	1-613-996-6666
Johnson Diversey	1-800-424-9300
Monsanto Canada Inc. (Accidents and spills)	1-800-332-3111
Monsanto Canada Inc. (Medical emergencies)	1-314-694-4000
Nalco Canada	1-800-463-3216
Nufarm Agriculture Inc.	1-202-483-7616
Saskatchewan Wheat Pool	1-613-996-6666
Quadra Chemicals (Newalta)	1-800-567-7455
Syngenta	1-800-267-6351
United Farmers of Alberta	1-800-592-5585
Univar	1-800-424-9300

TRAINING OF CWS EMPLOYEES

Below is the areas covered by CWS Logistics' ongoing training program along with the frequency of the training.

Training	Frequency
General Rules	Upon sign up of a new employee or when rules change
Safe Operating Procedures	At the start of a new job, ongoing.
T.D.G.	Every three years
MSDS / WHIMIS	Upon employment, with annual review
Forklift Training	Every three years or by Provincial Legislation
OH & S	Upon employment
First Aid and CPR	Every three years of by Provincial Legislation
Fire Extinguisher Training (Hands On)	Upon employment
Emergency Response Plan	Upon employment with annual review
Fire Plan	Upon employment with annual review
Evacuation Plan	Upon Employment with annual review
Fire Drills / Emergency Response Drill	Yearly
Equipment Shut Down	Upon employment with annual review

A record of all training completed or courses taken, to be filed in the individual employees' personnel file.

7. INSPECTION, TESTING AND MAINTENANCE REQUIREMENTS

Inspection and Maintenance	Frequency	Inspection By	Maintained By
Forklift	Daily	CWS	AR Williams
First Aid Kit	Monthly	CWS	CWS
Eyewash	Monthly	CWS	CWS
Fire Extinguisher	Monthly	CWS	Simplex Grinnell
ER Kit	Monthly	CWS	CWS
PPE Kit	Monthly	CWS	CWS
Heating, Ventilation and Air Conditioning System	Yearly	Qualified Electrician	Qualified Electrician
Fire Suppression System	Quarterly	Vipond Inc.	Vipond Inc.
Fire Suppression Monitoring System	Daily, Monthly, annually	CWS, Vipond Inc	CWS, ProTELEC Alarms
Emergency Lights	Monthly	CWS	CWS, Qualified Electrician
Electrical Supply	Yearly	Qualified Electrician	Qualified Electrician

All tests, inspections and maintenance reports to be kept and filed at CWS Logistics for two years.

APPENDIX - MAPS

APPENDIX G

GENERAL TERMS AND CONDITIONS