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| Revision #:Written by: | Date: Month DD, YYYYApproved by: |

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| **Related Documents:**  |  |
| **When to use this SWP:** | The tower silo is used to store bulk materials such as grain, silage, woodchips, sawdust, and food products. This safe work practice is intended to give an overview of working with tower silos to prevent incident and injury. |
| **Hazards & Risks:** | * Confined Space
* Falls from heights
* Hazardous gases and/or oxygen deficient atmosphere
* Machine related injuries
* Silo collapse.
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| **Personal Protective Equipment:** | * CSA/ANSI approved protective foot wear, safety glasses, masks or respirators, fall protection, gloves, coveralls or protective clothing, and hearing protection,
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| **Training Requirements:** | * Confined Space
* Fall Protection
* Fit Testing for Respirator
* Use of Basic PPE
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| **Communication Process:** | At least two people are required when working in confined space and where there is potential for a fall from heights. |
| **Equipment & Supplies:** | * First Aid Kit
* Fire Extinguisher
* Cell Phone or Two-way radio
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| **Procedure/Practice:**Regular Silo Inspection:* Door/Steps/Handles/Latches – rot, mould, corrosion, physical damage to structure
* Bolts/Head Bolts – tight, corrosion
* Unloader Wire Rope – Tear, stretching,
* Outside Ladder condition – steps clear of mud, manure, grease, corrosion, or other material

General Guideline:* Read the instruction manual, if available. If unavailable, contact the silo company.
* 12- 60 hours after filling the silo are most toxic with nitrogen dioxide gas.
* Avoid exposure for at least 10 days after filling the silo, if possible.
* Ensure adequate ventilation after filling by opening doors as well as using blowers.
* Erect warning signs noting it is confined space and authorized personnel only.
* Post signs in obvious locations for hazardous atmosphere, combustion, slip/fall, and collapse.
* Erect barriers to prevent unauthorized personnel from entering, where possible to prevent access.
* Keep hatch door open close to level of silage in silo.
* No persons allowed in and around silo when it is being filled or emptied.
* Only fill the silo with the contents it was intended for.
* Have repairs, service and maintenance by a professional.

Entering the Silo:* Entry 4 to 6 weeks after filling can result in serious injury or fatality.
* Only enter, if absolutely necessary.
* Only trained, competent, experienced, and knowledgeable workers are permitted in the silo.
* Be trained in confined space and ensure there is another person available to monitor conditions.
* Test the atmosphere for oxygen levels, hazardous gas, & vapours.
* Wear correct respirator for the atmospheric conditions: Air Supplying or air purifying.
	+ Air Supplying – for oxygen deficient atmospheres
	+ Air Purifying – remove contaminants from the air.
* Complete a confined space entry permit.
* Put on fall protection.
* Have a fall protection plan.
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| **Emergency Procedures:** | In case of emergency, contact 911 and your supervisor immediately. In the event of a fall, execute the fall protection plan to rescue fall workers. Follow confined space training.Remove yourself from harm’s way and ensure no one else is at risk.  |

Reference:

* Workplace Safety & Prevention Services <http://www.wsps.ca/WSPS/media/Site/Resources/Downloads/Silo_Safety_Final.pdf>
* Part 3 – Personal Protective Equipment of the NS General Regulations
* Part 5 – Handling & Storage of Material.
* Part 12 – Confined Space Entry of the NS OHS General Regulations
* Part 13 – Premises & Building Safety, Construction & Demolition.
* Part 21 – Fall Protection of the NS Workplace Regulations