

Ministry of Agriculture, Food and Rural Affairs

Engineering Requirement Form

Environmental Management Branch Section 1 — Project Information Project Name **Project Mailing Address** Unit No. Street No. Street Name **Rural Route** PO Box City/Town/Village Postal Code Province **Ontario** Section 2 — Applicant Declaration **Declaration** This is to certify that I, as the Applicant, understand that under the Nutrient Management Act, 2002 and Ontario Regulation 267/03, as amended, I am required to retain professional engineering services for design and general review of certain projects and situations. I also understand that it is my responsibility to submit a completed Engineer's Commitment Certificate signed and dated by the Professional Engineer(s) who will provide design and general review of the project components identified on this form. The Engineer's Commitment Certificate will be submitted to the Chief Building Official at the local building authority as part of my building permit application for the related project. Applicant Last Name Applicant First Name Applicant Signature Date (yyyy/mm/dd) Section 3 — Project Components Information **Project Components Requiring Engineering** Design/General All in accordance with Ontario Regulation 267/03, as amended, and all applicable law. Review Required A. Site Characterization performed by a Professional Engineer or Geoscientist* Sub-surface information, soil properties, water table and bedrock location. Yes N/A *Geoscientist retained to perform a Site Characterization evaluation must be a member of the Association of Professional Geoscientists of Ontario. B. Synthetic or Compacted Soil Liner. Yes N/A Design details, including details of site review and testing where applicable. C. Earthen Storage Facilities Siting, design and construction of a permanent nutrient storage facility made of earth, including details for any Yes N/A embankment penetrations to accept transfer system piping and to prevent leakage at those locations. D. Liquid Storage Facilities Siting, design and construction of a permanent liquid nutrient storage facility, Includes wall openings where transfer piping penetrates permanent liquid nutrient storage, sump or holding pit, where nutrient leakage could occur. All such openings shall include provision for flexible watertight gasket or membrane to prevent leakage, and design details shall be included with the structural drawings. Yes N/A Liner - Unless a designer has been identified in Part B, then the following applies. If the site characterization report either specifies a liner or reveals a soil condition that requires a liner be used, the structural engineer designing the storage is responsible for incorporating a liner in the design drawings and specifications, and for site review of same. E. Transfer Systems Design and construction to include all piping, connections and associated fittings/couplings to prevent leakage of liquid nutrients transferred to a permanent liquid storage. Flush systems are considered transfer systems. Coordinate with structural engineer regarding wall penetrations for transfer system piping and fittings that prevent leakage at the connection. Yes N/A Commercial pump systems: If the design of transfer system piping - type, size, operating pressure and gasketed connections – is clearly described in the pump manufacturer's installation guide and specification,

then only site review of construction is required.

shall be designed by a qualified professional engineer.

Note: Design of wall openings in nutrient storages, sumps and holding pits to accept transfer system piping

F. Solid Storage Facilities Siting, design and construction of a permanent solid nutrient storage facility. Note: If a solid storage is to hold rainfall or any other liquid (excluding milkhouse washwater that meets the requirements of s.61.5 of the Regulation), it must be designed as a liquid storage (see Liquid Storage Facilities). Note: The structural engineer designing the storage must ensure a runoff management system is included as part of the storage design, and is in place.	Yes	□ N/A
G. Vegetative Filter Strip System (VFSS) Siting, design and construction. Reference OMAFRA publication 826 for design details.	Yes	□ N/A
H. Facilities for the Storage of Off-Farm Anaerobic Digestion Material Siting, design and construction for storage facilities.	Yes	□ N/A
I. Regulated Mixed Anaerobic Digestion System Siting, design and construction for digester construction and operation.	Yes	□ N/A
J. Further Treatment System for Off-Farm Anaerobic Digestion Materials Siting, design and construction of further treatment systems.	Yes	□ N/A
K. Design of Facility to Reduce Total Volatile Solids by at least 50 per cent If digester operation has less than 20 day average AD treatment time.	Yes	□ N/A
L. Design of Facility to Reduce Total Volatile Solids by at least 50 per cent If digester is operated at less than 35 degrees Celsius.	Yes	□ N/A
M. Minimization of Odour Emissions For facilities accepting off-farm materials from Schedule 2, or facilities storing OC1 or OC2 Non-Agricultural Source Materials.	Yes	□ N/A

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