



**Reducing the Use of Neonicotinoid Insecticides:
Amendments to Ontario Regulation 63/09 under the Pesticides Act**

**Ministry of the Environment and Climate Change
Ministry of Agriculture, Food and Rural Affairs**

Overview for Agriculture Stakeholders

Context: Pollinators and Pollinator Health

- Both wild and managed pollinators play a crucial role in the reproduction of flowering plants and in the production of most fruits and vegetables. Certain field crops either rely on insect pollination or benefit from it in terms of yield.
- Scientific evidence shows declining health of pollinators related to complex interactions among multiple stressors, including pesticide exposure. A growing body of research shows exposure to neonicotinoid insecticides (NNI) is threatening the health of bees and other pollinators.
- There are other concerns with NNIs, including the potential for residues in soil to be transported through run-off from fields to nearby water bodies.

Pollinator Health Action Plan

- The Ministry of Agriculture, Food and Rural Affairs, the Ministry of the Environment and Climate Change and the Ministry of Natural Resources and Forestry have been directed to develop a strategy to improve pollinator health.
- The government has set aspirational targets:
 - to reduce the over-winter honey bee mortality rate to 15 per cent by 2020; and
 - to reduce the number of acres planted with neonicotinoid-treated corn and soybean seed by 80 per cent by 2017.
- The first step in this strategy was to develop new regulatory requirements to be in effect by July 1, 2015.

Overview of the New Regulatory Requirements

The regulation establishes a system to address neonicotinoid-treated seeds:

1. New class of pesticides established under the *Pesticides Act* and Ontario Regulation 63/09 for grain corn and soybean seed when treated with imidacloprid, thiamethoxam and/or clothianidin – these would be known as “**Class 12**” pesticides. This is a change as pesticide treated seeds were not previously regulated by the province.
2. Establishes methods to assess if pest problems require the use of neonicotinoid treated grain corn or soybean seeds.
3. Sets out requirements for the sale and use of neonicotinoid treated grain corn and soybean seeds.
4. Tracks the sale of neonicotinoid-treated grain corn and soybean seeds to measure progress in reaching the government’s target to reduce the number of acres planted with NNI-treated grain corn and soybean seed by 80 per cent by 2017.

Overview of the Changes Made to the Draft Regulation

More Flexible Timeframes for Implementation

- Allowing additional time for farmers to take the new integrated pest management training
- Encouraging early participation in the new integrated pest management training by offering training free of charge for the first year of implementation, until September 2016
- Establishing more flexible licensing requirements for direct-to-farm vendors
- Allowing vendors to continuously provide updates to the list of neonicotinoid-treated corn and soybean seed to provide additional flexibility as new seeds could come to market

Pest Assessment Framework Adjustments

- Extending the expiration date of a pest assessment report by two months
- Population thresholds for grubs and wireworms in soil pest assessments to be based on averaging of results from 5 holes
- Additional insect added as an eligible pest (bean leaf beetle in soybeans) for crop damage assessment

More Flexibility for Professional Pest Advisor Requirements – Capacity

- Allowing professional pest advisors to supervise other people in conducting pest assessments
- Phasing in requirements for professional pest advisors on a county-by-county geographic basis
- Independence requirement for professional pest advisors to take effect starting in 2017

Overview of the New Regulatory Requirements

Scope

- New requirements apply to grain corn and soybean seed treated with the three neonicotinoid insecticides (imidacloprid, thiamethoxam and/or clothianidin).
- Corn refers to grain corn (includes silage corn)
 - Does not include popping corn, sweet corn or corn used for the production of seed
- New requirements do not apply to a Class 12 pesticide to be used in accordance with a seed production contract for the purpose of producing a soybean seed crop of certified status (as defined in the federal *Seeds Regulations*).
- Not included in the new regulatory requirements:
 - Seed treatments for seeds of other field crops (e.g., canola, dry beans, cereals)
 - Other uses of neonicotinoid insecticides (e.g., foliar sprays)
 - Seeds treated with other substances only (e.g., fungicides, inoculants, polymers)
- Existing exemptions in the pesticides legislation for industry and scientific research apply to Class 12 pesticides as well.

Overview of the New Regulatory Requirements Use of Treated Seed

Corn and Soybean Growers

The regulation sets out new requirements for growers to buy and use (i.e., plant) Class 12 pesticides. Integrated Pest Management training is one key new requirement.

- A new, ½ day Integrated Pest Management course will be available in fall 2015. It will be available throughout the year and will be offered at a variety of locations and online.
- As an incentive to participation, the half day course will be offered free of charge if taken before September 2016.
- Following successful completion of the course, a certification number will be given. This certification would be valid for five years. In addition to growers, others may also wish to take this training (including vendors, professional pest advisors and custom operators doing fieldwork for growers).
- After August 31, 2016, all growers purchasing and planting Class 12 pesticides will be required to have completed training in the new IPM course. An IPM-trained grower can supervise up to seven people to assist with planting. The regulation sets out the conditions for supervision.

Overview of the New Regulatory Requirements Use of Treated Seed

Corn and Soybean Growers

The regulation includes new requirements for pest assessments to be completed in order to purchase and use Class 12 pesticides. Pest assessments assist in identifying pest problems and in determining if pests are present above thresholds. Pest thresholds must be met or exceeded in order for a grower to be eligible to buy and use Class 12 pesticides.

- A Pest Assessment Report must be completed every year to purchase and use Class 12 pesticides.
- For the Pest Assessment Reports, there are two pest assessment methods:
 - Soil Pest Assessment to determine levels of grubs or wireworms present in the soil
 - Crop Damage Pest Assessment to confirm damage to crops from eligible pests of corn and soybeans
- The Pest Assessment Guideline (*Conducting a Pest Assessment for Use of Class 12 Pesticides*) provides the details about pest assessment methodologies and pest or pest damage thresholds.
- Neonicotinoid-treated corn or soybean seed may be planted only in the application area identified in the pest assessment report.

Overview of the New Regulatory Requirements Use of Treated Seed

Corn and Soybean Growers

There is a voluntary approach that allows growers to purchase and use Class 12 pesticides for the 2016 growing season, if they provide a signed Seed Amount Declaration. As an incentive to early reduction, a grower using this approach would not be required to do a Pest Assessment Report.

- The Seed Amount Declaration form states that the grower will not plant more than 50% of the total area of land where they plant corn or soybeans in their farm operation with Class 12 pesticides. The 50% calculation is completed separately by commodity for each of corn and soybeans.
- Growers will need to provide the signed Seed Amount Declaration to the sales representative or seed vendor or to the custom seed treater they use to have their seed treated with neonicotinoid insecticides.
- If the grower purchases seed from more than one seed vendor or through multiple sales representatives or direct-to-farm vendors, the grower can use the same completed Seed Amount Declaration form for each commodity (i.e., corn or soybeans).
- If growers want to buy and plant neonicotinoid-treated seeds on more than 50% of the total area of their corn or soybean crop for the 2016 growing season, they will need to complete a Pest Assessment Report.

Overview of the New Regulatory Requirements Use of Treated Seed

Corn and Soybean Growers

The Pest Assessment Guideline outlines how assessments are to be conducted, sets out the minimum thresholds, and explains how to calculate the application area where the neonicotinoid-treated seeds are to be planted at the farm property. Pest thresholds must be met or exceeded in order for a grower to be eligible to buy and use Class 12 pesticides.

Soil Pest Assessment – Scouting

- A soil pest assessment (scouting) is a method that confirms the presence of grubs or wireworms in soil at a farm property.
- A report must verify that pest thresholds have been met or exceeded (populations may be averaged over five holes):
 - an average of 2 grubs per scouting location averaged over 5 scouting locations; or
 - an average of 1 wireworm per scouting location averaged over 5 scouting locations
- A grower can choose when to do soil pest scouting.
- The Guideline contains detailed information on soil pest assessments, such as how deep and far apart holes (scouting locations) must be.

Overview of the New Regulatory Requirements Use of Treated Seed

Corn and Soybean Growers

Soil Pest Assessment – Scouting (continued)

- From August 31, 2015 to August 30, 2016, any grower can do soil pest scouting and prepare a pest assessment report.
- Starting August 31, 2016 until August, 30, 2017, growers will be able to perform a pest assessment and prepare a report if they if they have a certificate number from completion of the new integrated pest management (IPM) training.
- Starting on August 31, 2017, a requirement that a professional pest advisor conduct a soil pest assessment and prepare a report will begin to be phased in. This requirement is being phased in over time on a geographic basis.
- Once the professional pest advisor requirement is phased in, a professional pest advisor will need to perform (or supervise) the soil pest scouting assessment and complete and sign the report at least once every three years.

Overview of the New Regulatory Requirements Use of Treated Seed

Corn and Soybean Growers

Crop Damage Pest Assessment

- If a grower believes they have experienced crop damage from eligible pests (grubs, wireworms, seedcorn maggot or bean leaf beetle), they can choose to have a crop damage assessment conducted.
- A professional pest advisor will always be required to conduct this assessment as this method requires specialized knowledge of pests and crop damage.
- Crop damage assessment is a method that confirms:
 - at least a 15 per cent stand loss in corn caused by eligible pests
 - at least a 30 per cent stand loss in soybeans caused by eligible pests.
- The Guideline contains detailed information on crop damage pest assessments, such as the eligible pests and the methods for calculating stand loss.
- Crop damage assessments may be conducted on or after March 1, 2016.
- The pest assessment can be used for 12 months to purchase a Class 12 pesticide.

Overview of the New Regulatory Requirements Use of Treated Seed

Corn and Soybean Growers

The Pest Assessment Guideline also sets out how the application area will be established. The application area consists of the fields where a Class 12 pesticide can be used (i.e., where the neonicotinoid-treated seed can be planted). A pest assessment that is not performed in accordance with the Guideline will not meet the legal requirements of O. Reg. 63/09.

- The person completing the pest assessment report will set and describe the application area.
- An application area cannot be any larger than the parcel of land for which a single municipal assessment roll number exists.
- For soil pest assessments (but not crop damage pest assessments), the Guideline caps the size of a single application area at 100 acres.
- What does this mean for completing assessments?
 - For soil scouting, if the area of land that is being scouted extends into multiple parcels each with separate municipal assessment roll numbers, each parcel will have to be treated as a separate scouting unit and listed as separate application areas in the pest assessment report.
 - For soil scouting, if the area of land that is being scouted exceeds 100 acres, it will need to be subdivided into separate scouting units of 100 acres or less in size. Calculating pest populations and averaging will be treated separately within each scouting unit. For example, if the intention is to use Class 12 pesticides on 250 acres, there will be a minimum of three plots identified as separate soil scouting units.

Overview of the New Regulatory Requirements Use of Neonicotinoid-Treated Seed

Corn and Soybean Growers

Summary of Documentation Required at Time of Placing Seed Order.

<i>Document</i>	<i>Notes</i>
Seed Amount Declaration	Applies to 2016 growing season only. If no Seed Amount Declaration provided and the grower still chooses to use NNI-treated seeds, buyer must provide a Pest Assessment Report to purchase a Class 12 pesticide.
Pest Assessment Report <ul style="list-style-type: none"> • Soil Pest Assessment • Crop Damage Pest Assessment 	Crop Damage Pest Assessment Reports cannot be completed before March 1, 2016 and must always be completed by a professional pest advisor
Declaration of Consideration of IPM Principles	Required as of August 31, 2016
Proof of Grower's Certification of IPM Training	Required as of August 31, 2016

Overview of the New Regulatory Requirements Use of Treated Seed

Corn and Soybean Growers

- Growers will be permitted to buy and use only those neonicotinoid-treated corn and soybean seeds that vendors have put on the “Class 12 Pesticides List”.
- Seeds will be listed by variety/hybrid name.
- The list will be posted on a Government of Ontario website by August of each year.

Overview of the New Regulatory Requirements Use of Treated Seed

Corn and Soybean Growers

Additional requirements also apply to the use of a Class 12 pesticide, including grower activities before, during and after planting.

- When Class 12 pesticides are used, the grower must read and comply with the pesticide label and seed tag instructions. This includes but is not limited to:
 - Use a specified dust-reducing fluency agent (if a seed flow lubricant is being used)
 - Avoid equipment maintenance in areas that may affect bee colonies or where bees are foraging
 - Spilled or exposed seeds and dust must be incorporated into the soil or cleaned up from the soil surface
- These requirements may be updated by the federal Pest Management Regulatory Agency (PMRA) over time. Check the information in the Pesticide Product Information Database for directions that may have been added and the PMRA website for summary factsheets.
- Growers are also required to keep copies of pest assessment reports and other records for Class 12 pesticides for at least two years.

Overview of the New Regulatory Requirements

Role of Professional Pest Advisors

Professional Pest Advisors perform pest assessments and prepare reports that verify if there are pest problems on a farm. They may supervise up to 7 trained individuals when present at a farm location (where conditions met).

A Professional Pest Advisor must be one of the following:

- a Certified Crop Advisor (CCA) (American Society of Agronomy / Ontario Certified Crop Advisor Association)
- a professional agrologist (P. Ag.) under the *Ontario Institute of Professional Agrologists Act, 2013*, with a field of practice relating to pest control or the production, processing and protection of agricultural, horticultural and related products and supplies
- a holder of an authorizing certificate issued by an out-of-province authority in respect of a field of practice similar to a professional agrologist or CCA
- a person who has equivalent qualifications as determined by the Ministry of the Environment and Climate Change

Overview of the New Regulatory Requirements

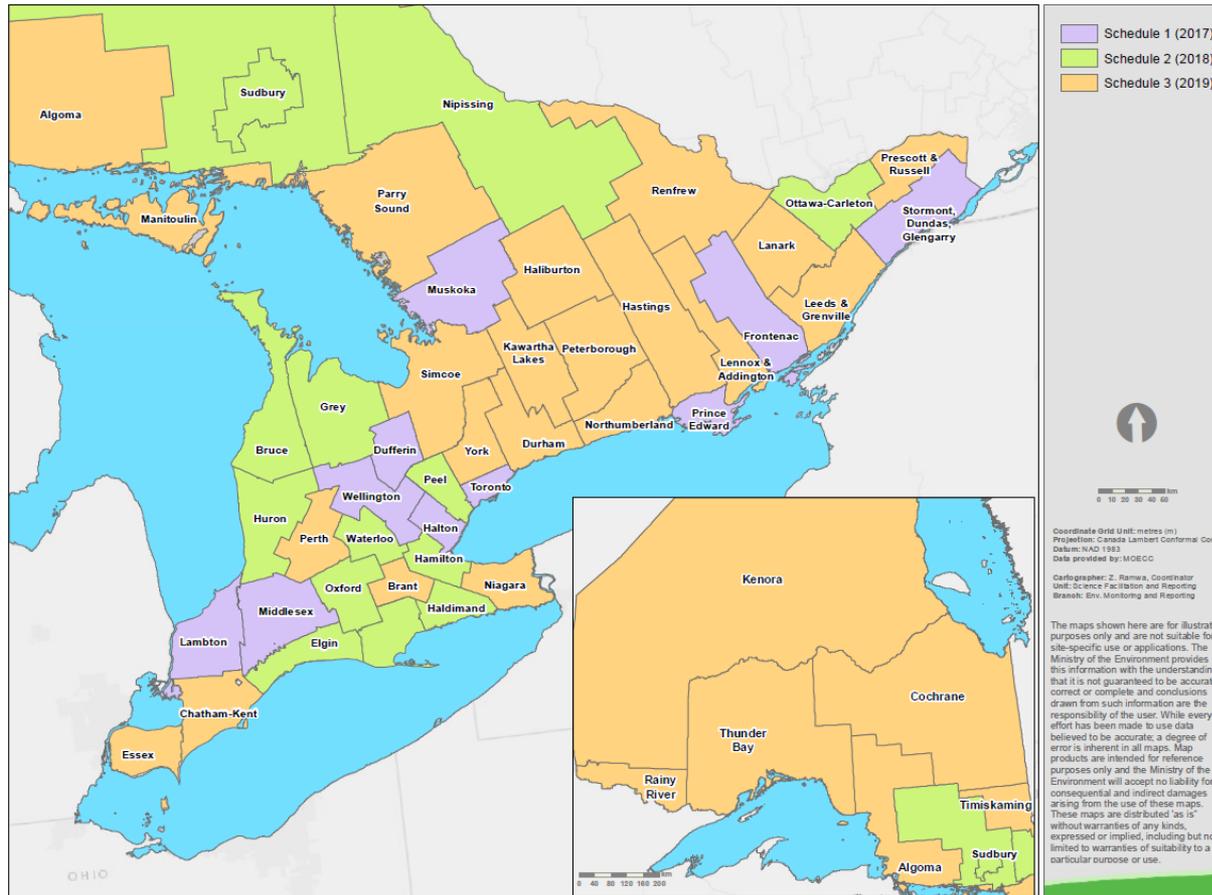
Role of Professional Pest Advisors

- Growers are required to use a Professional Pest Advisor for all crop damage pest assessments.
- For pest assessment reports based on soil scouting, the requirement to retain a Professional Pest Advisor will be phased in on a county/region basis beginning in 2017 (see map on following slide). Once the requirement applies, a Professional Pest Advisor will need to be used for a soil pest assessment at least once every three years.
 - An IPM-certified grower can complete the soil pest assessment and sign the pest assessment report in the intervening years.
- Beginning on August 31, 2017, a professional pest advisor must be independent (i.e., cannot derive a financial benefit from a person (including a business corporation) manufacturing or selling a Class 12 pesticide).

Overview of the New Regulatory Requirements

Role of Professional Pest Advisors

Schedules for Amendments to the Pesticides Regulation



Overview of the New Regulatory Requirements Sale of Treated Seed

New requirements for the sale and transfer of Class 12 pesticides will affect the seed industry:

Licence required:

- Vendors (including seed manufacturers and some seed dealers)

Licence not required (but other requirements apply):

- Direct-to-farm vendors (qualifying seed dealers)
- Sales representatives
- Custom seed treaters

Overview of the New Regulatory Requirements Sale of Treated Seed

Vendors

Unless exempt, any person who sells, offers for sale or transfers a pesticide must be licensed as a vendor. In order to sell Class 12 pesticides, a vendor must obtain a Treated Seed Vendor Licence on or before August 31, 2015 (\$200 cost, valid for 5 years) and follow the new regulatory requirements.

Key new requirements include:

- A vendor would have to disclose in all advertising of a Class 12 pesticide whether the corn or soybean seeds being sold are Class 12 pesticides and whether they contain imidacloprid, thiamethoxam or clothianidin.
- When a vendor advertises a Class 12 pesticide, he or she would also have to advertise that corn and soybean seeds not treated with neonicotinoid insecticides are available for sale.
- The vendor would be required to provide a list of all Class 12 pesticides that the vendor intends to offer for sale in Ontario by July 30, 2015 (and annually for 2016 and future years). List can be updated over time.
- The vendor would be required to retain records for at least four years and to report the sale of Class 12 pesticides and non-NNI treated corn and soybean seeds to the Ministry of the Environment and Climate Change by October 31 each year. Completed pest assessment reports must also be forwarded each year by October 31 to OMAFRA.
- If a vendor uses sales representatives to facilitate transactions of Class 12 pesticides, the vendor must ensure that the sales representatives receive suitable training and carry appropriate identification.

Overview of the New Regulatory Requirements Sale of Treated Seed

Direct-to-Farm Vendors

Direct-to-Farm vendors who sell Class 12 pesticides to growers only may be exempt from licensing and reporting requirements if they meet certain conditions and are identified to MOECC by a licensed treated seed vendor. There are new requirements for these direct-to-farm vendors.

Although no licence is required, key requirements for direct-to-farm vendors include:

- Verify that purchasers of Class 12 pesticides have provided the required documentation when the order is placed (but no requirement to interpret or verify the contents of the documentation)
- Forward the required documents to the licensed Treated Seed Vendor within 30 days
- Keep records of sales of Class 12 pesticides for at least two years

Overview of the New Regulatory Requirements Sale of Treated Seed

Sales Representatives

Treated Seed Vendors may have sales representatives who represent the business by facilitating the sale of seeds through direct contact with the grower when seeds are purchased. There are new requirements for these sales representatives of Class 12 pesticides.

Although no licence is required, key requirements for treated seed sales representatives include:

- Participate in the training required to be provided by the licensed Treated Seed Vendor
- Carry the company identification provided by the licensed Treated Seed Vendor
- Verify that purchasers of Class 12 pesticides have provided the required documentation when order placed (but no requirement to interpret or verify the contents of the documentation)
- Forward the required documents to the licensed Treated Seed Vendor within 30 days
- Keep records of sales of Class 12 pesticides for at least two years

Compliance

- Compliance with the new requirements is mandatory under the *Pesticides Act*
- MOECC manages its approach to compliance and enforcement through a variety of approaches:
 - Inspections
 - Responses to incidents
 - Voluntary abatement
 - Orders
 - Tickets (applicable to a limited number of pesticide vendor-related offences at present time)
 - Prosecutions through the courts
- MOECC officials use an informed judgment matrix as outlined in its Compliance Policy as a decision-making tool

Available Resources

www.ontario.ca/neonics

- Amended Ontario Regulation 63/09
- Pest Assessment Guideline – *Conducting a Pest Assessment for Use of Class 12 Pesticides*
- Fact Sheets:
 - Growers
 - Seed industry (vendors, direct-to-farm vendors, sales representatives, custom seed treaters)
 - Professional pest advisors
- Forms

OMAFRA resources - <http://www.omafra.gov.on.ca/english/crops/reduceneonics.html>

- Fact sheets on best management practices for pollinator protection
- Information on soil scouting techniques and pest identification

Appendix – Key Dates in 2015 and 2016

Date	Requirement
July 31, 2015	Deadline for vendors to submit list of Class 12 pesticides to be offered for sale in Ontario to MOECC (by variety name/identifier) (Note: vendor licence application should be submitted first)
August 31, 2015	Last day for vendors to obtain Treated Seed Vendor licence for Class 12 pesticides
Fall 2015	Estimated start of IPM training
March 1, 2016	Pest assessment reports (crop damage) can be completed by a professional pest advisor after this date
August 30, 2016	Last day for growers to conduct soil scouting and complete a pest assessment report without their IPM training certification
October 31, 2016	Deadline for vendors and custom seed treaters to submit reports to MOECC and OMAFRA