

**Small Business Economic Impact Statement**  
Chapter 16-470 WAC  
Quarantine – Agricultural Pests  
*June 6, 2018*

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**SECTION 1:**

**Describe the proposed rule, including: a brief history of the issue; an explanation of why the proposed rule is needed; and a brief description of the probable compliance requirements and the kinds of professional services that a small business is likely to need in order to comply with the proposed rule.**

Chapter 17.24 RCW mandates “a strong system” to protect the forest, agricultural, horticultural, floricultural, and apiary industries of the state from the impact of insect pests, plant pathogens, noxious weeds, and bee pests and infestations. The Washington State Department of Agriculture (WSDA) is charged with implementing that mandate by excluding plant and bee pests and diseases from the pest free areas of the state through regulation of movement and quarantine of infested areas. RCW 17.24.041 authorizes the Director of WSDA to adopt quarantine areas by rule and to prohibit the movement of all regulated commodities from the quarantined areas.

Chapter 16-470 WAC establishes the parameters of the apple maggot quarantine and pest free areas within Washington State. WSDA is proposing to expand the apple maggot quarantine area to include portions of Okanogan County, specifically within the Methow Valley north of Gold Creek.

The apple maggot (fruit fly) is an invasive insect pest native to Eastern North America. Its hosts include apples, crabapple, and native and ornamental hawthorn. During the larval stage, apple maggot can cause extensive damage to fruit, decreasing crop yields. It is also economically significant to the Washington apple industry, as fruit from the pest free area has greater access to international markets.

Each year, WSDA conducts apple maggot surveys to determine which areas of Washington meet the official pest free designation, conducts certification monitoring in or around apple orchards, and implements an Apple Maggot Detection Response Plan. Recent apple maggot surveys within Okanogan County provide evidence that the state’s apple maggot population has expanded its range. Expanding the apple maggot quarantine area may better protect the apple industry by slowing the possible movements of apple maggot from infested areas into the pest free area. In turn, this could help secure the apple industry’s access to domestic and international markets, which have strict regulations around apple maggot.

The movement of non-commercial (for example, back yard trees) fruit from apple maggot infested areas to the pest free areas of apple production poses an unacceptable risk to the tree fruit industry. Additionally, municipal solid waste, yard debris, organic feedstock, organic materials, and agricultural wastes are host mediums for apple maggot because they may contain apples, crabapple, and native hawthorn and pose an unacceptable risk if allowed to move from infested to pest free areas as documented in the *Pest Risk Analysis (PRA) for Apple Maggot (Rhagoletis pomonella) Moving on Municipal Green Waste into the Pest Free Area (PFA) of the State of Washington*, written by Dr. C. E. Sansford, Mr. V. Mastro, and Mr. J. R.

Reynolds, in April, 2016. For the full PRA, visit our website at:  
[https://agr.wa.gov/PlantsInsects/InsectPests/AppleMaggot/docs/FINAL\\_PRA\\_30\\_4\\_2016\\_2.pdf](https://agr.wa.gov/PlantsInsects/InsectPests/AppleMaggot/docs/FINAL_PRA_30_4_2016_2.pdf)).

The proposed expansion of chapter 16-470 WAC to include parts of Okanogan County aims to prevent or minimize the movement of apple maggot from infested areas, to pest free areas of Washington. As shown in the proposed quarantine area, there are a large number of apple orchards located in the pest free area, which are in close proximity to the proposed quarantine area (see link to map at:  
<https://agr.wa.gov/LawsRules/Rulemaking/PP/AppleMaggotQuarantineboundary32118.aspx>).  
 The proposed quarantine is aimed at protecting these apple orchards, as well as the apple industry in Washington from an economically detrimental pest.

In order to comply with the proposed quarantine, apple orchards which transport fruit from the quarantine area, to or through the pest free area will need to go through the apple maggot certification process. The certification process involves trapping and potential field inspections of the fruit. This process is provided at no cost to the orchards by WSDA.

Solid waste collection companies and other waste haulers will need to segregate green waste from solid waste in order to comply with the proposed quarantine regulations. They will also be restricted from moving green waste located in the quarantine area, to the pest free area.

Landscaping services which collect and haul green waste within the proposed quarantine area will be required to comply with the proposed rule.

Professional services will not likely be required for small businesses to comply with the proposed rule.

**SECTION 2:**

**Identify which businesses are required to comply with the proposed rule using the North American Industry Classification System (NAICS) codes and what the minor cost thresholds are.**

NAICS Code (4, 5 or 6 digit)	NAICS Business Description	# of Businesses in WA	Minor Cost Threshold = 1% of Average Annual Payroll	Minor Cost Threshold = .3% of Average Annual Receipts
562111	Solid Waste Collection	160	\$12,069.56	\$17,744.53
111331	Apple Orchards	885	\$7,205.35	Data not available
561730	Landscaping Services	2,509	\$1,525.08	\$1,242.18
562119	Other Waste Collection	16	Data not available	Data not available

**SECTION 3:**

**Analyze the probable cost of compliance. Identify the probable costs to comply with the proposed rule, including: cost of equipment, supplies, labor, professional services and increased administrative costs; and whether compliance with the proposed rule will cause businesses to lose sales or revenue.**

## Apple Orchards

The proposed expansion of the apple maggot quarantine area will incorporate five apple orchards that appear to be small businesses as defined by RCW 19.85.020(3). There are no orchards in the area that are considered large businesses. Some of the apple orchards sell locally at farmers markets, some use their apples to make cider, and one transports their apples to western Washington.

The boundaries of the proposed quarantine could impact any of the five apple orchards which currently transport or sell apples from the pest free area. These orchards would be required to go through the apple maggot certification program, however this would be at no cost to them. The certification program involves WSDA setting apple maggot traps within a half mile of the orchard, to determine the orchard's threatened or non-threatened status (as defined in WAC 16-470-103(2)). The orchard is considered threatened if, any life stage of apple maggot has been found within one-half mile of an orchard or other production site. Additionally, any orchard located within a quarantined area that has not been surveyed is also considered threatened. An orchard will be removed from threatened status, if control measures are performed at the detection site, and if survey by WSDA shows no further detections within a one-half mile area around the site through the following growing season.

The results of the orchard trapping survey are reported to the WSDA Commodity Inspection Division (WSDA CID). Before an apple orchard can sell fruit outside of the quarantine area, WSDA CID must issue a permit which allows for the movement of fruit. If the orchard was considered threatened, there are steps they must take in order to get this permit. They could have Commodity Inspection personnel conduct a free inspection of a portion of the fruit for signs of apple maggot. If no detections are found, they are eligible to receive a permit. In the alternative, they could complete cold storage treatment as specified in WAC 16-470-118(3).

The apple maggot certification process and permit for the movement of fruit will not incur any extra cost to the apple orchard. However, if an apple orchard is under threatened status, it may require control measures. These measures will likely be an added cost to the orchard. These control measures could include the use of pesticides or cold storage to neutralize the pest. Not all orchards will need to utilize additional control measures. Under existing rules, an orchard can already be considered 'threatened' if any life form of apple maggot is detected within one-half mile thereby requiring additional control measures.

Determining exact costs to apple orchards is difficult because control measures will not be required for all orchards and techniques used may vary. After an apple orchard successfully completes the apple maggot certification program, there should be no loss of sales or revenue.

Professional services will not likely be required for apple orchards to comply with the proposed rule.

## Solid Waste Collection Companies

Entities impacted by the proposed rule include Okanogan County and businesses involved in waste management. Currently, unsorted municipal waste containing apple maggot host material is transported from the proposed quarantine area to a landfill located in the pest free area. Under an expanded quarantine, municipal waste could no longer leave the quarantine boundaries without a special permit issued by WSDA.

Individual households and other 'self-haulers' would also be prohibited from moving household waste from the proposed quarantine area to the landfill in the pest free area. These are not small businesses and are not considered in this assessment. Additionally, landscaping and other waste collection companies (those specializing in bulk household waste removal) will be required to comply with the proposed rule. However, these companies will incur less than minor costs as identified in Section 2. This is because, these companies are more specialized in terms of what materials they pick-up and transport.

The proposed expansion of the quarantine area will impact two Okanogan County Public Works facilities and one private waste hauling company. The county facilities impacted by the restrictions of the quarantine include a transfer station located in the proposed quarantine area and a landfill located in the pest free area. Currently, the county hauls waste from the transfer station to the landfill. WAC 16-470-060 restricts the transport of municipal solid waste and green waste from being transported from a quarantine area to a pest free area without a WSDA Special Permit. Unless a special permit was granted, waste could no longer be hauled from the transfer station in the quarantine area to the landfill in the pest free area. Special permits are granted on a case-by-case basis and cost \$125 for a five-year permit. If a special permit was granted to Okanogan County, they would cover the cost of the permit and be responsible for making sure all waste brought to their facilities is compliant with the regulations. The regulations of the proposed quarantine would require that green waste and solid waste be separated, before municipal solid waste can be transported to the landfill in the pest free area. Separated green waste would be required to remain within the quarantine area or be heat treated before being transported from the quarantine area to the pest free area. The facility would need to separate, store and treat any green waste received. The County is not considered a small business and therefore was not considered in this assessment.

The private waste hauling company that will be impacted by the proposed quarantine specializes in collection within the Methow Valley. The company does not currently separate green waste that is collected. Since this company deposits waste at the county transfer station, any regulations imposed on that facility by the quarantine, will carry forward to them. Therefore, the company would need to begin collecting green waste separately. Starting a green waste collection program may prove costly, as educational outreach to customers would likely take place, a separate collection truck would need to be designated, and new collection or drop-off containers may be required. The private company only has one side loading garbage truck, so separating green waste may be difficult. Staff may also be required to work extra shifts or additional employees may be hired.

The private waste hauling company's current collection routes take them in and out of the proposed quarantine area. For this route, the garbage truck collects all trash on the right side of the road while heading South on Highway 153 to milepost 2 outside of Pateros, then turns around and collects on the other side of the road while heading North on Highway 153 to Twisp. To avoid quarantine violations, the company would have to modify this collection route so waste from the quarantine area is not transported into the pest free area. Since their garbage truck is a side loader, they can only pick up from the right side of the road. This will make changes to their collection route difficult and may force them to double-back in some areas, which may prove costly both financially and timewise. Additionally, the county's transfer station has a small footprint, so with separation and treatment of green waste occurring, this might cause delays or slower drop-off times for the waste hauling company.

Determining exact costs for the private hauling company is difficult, because the cost can vary greatly depending on logistical and operational changes the organization chooses to make. However, costs to the private hauler will be more than minor as identified in Section 2.

The proposed quarantine amendment may cause the private hauling company to lose sales or revenue. Customers of the private hauling company will be required to segregate green waste. This may cause discontent among customers which could ultimately lead to a loss of sales.

Professional services will not likely be required for the waste hauling company to comply with the proposed rule.

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#### **SECTION 4:**

**Analyze whether the proposed rule may impose more than minor costs on businesses in the industry.**

Overall, it is possible that the proposed quarantine could impose more than minor costs on apple orchards and businesses in the solid waste collection industry. However, a 2016 analysis done by the United States Department of Agriculture National Agricultural Statistics Services found that apples are Washington's top commodity, grossing around \$2 billion annually and adding to the State's overall economy. Any threat to Washington's apple industry by large or small businesses is unacceptable to WSDA under its statutory mandate to protect agriculture from plant pests.

The boundaries of the proposed quarantine will impact apple orchards which transport or sell apples in the pest free area. These orchards would be required to go through the apple maggot certification program, this would be at no cost to them. However, if an apple orchard is under threatened status, it may require control measures. These measures will likely be an added cost to the orchard. Determining exact costs to apple orchards is difficult, because control measures will not be required for all orchards and techniques used may vary. After an apple orchard successfully completes the apple maggot certification program, there should be no loss of sales or revenue.

Entities impacted by the proposed rule include Okanogan County and businesses involved in waste management. The County is not considered a small business and therefore was not considered in this assessment. Determining exact costs for the private hauling company is difficult, because the cost can vary greatly depending on logistical and operational changes the organization chooses to make. However, we expect the private hauling company to incur more than minor costs as identified in Section 2 in order to comply with the rule amendment.

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#### **SECTION 5:**

**Determine whether the proposed rule may have a disproportionate impact on small businesses as compared to the 10 percent of businesses that are the largest businesses required to comply with the proposed rule.**

The five apple orchards located within the proposed quarantine area are all considered small businesses under chapter 19.85 RCW. Since there are no large businesses impacted by the proposed amendment, the impact is inherently disproportionate. However, any additional control measures apple growers may be required to undertake will be based on acreage and crop size.

The larger the acreage, the more pesticide will be needed. Commercial apple orchards may already be using a variety of control measures (including pesticides) to control apple maggot. Larger acreage normally relates to a larger crop. If the apple grower decides to store their apples in a controlled atmosphere storage facility as a control measure, costs will be based on the amount of apples. However, the statutory purpose of the proposed rule is to protect Washington's apple industry, therefore the proposed amendment is necessary.

The transfer station and landfill which will likely be impacted by the proposed quarantine are operated by Okanogan County Public Works, which is not considered a small business in this assessment. The private waste hauler is considered a small business and will be disproportionately impacted by the proposed rule. This is largely due to the fact that they are the only residential solid waste hauler servicing the proposed quarantine area. There are no large business waste haulers operating there.

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## **SECTION 6:**

**If the proposed rule has a disproportionate impact on small businesses, identify the steps taken to reduce the costs of the rule on small businesses. If the costs cannot be reduced provide a clear explanation of why.**

Apple orchards within the proposed quarantine area will not experience a cost increase due to the apple maggot certification program. This program is conducted by WSDA and there is no cost associated with it. All trapping and inspection is done by WSDA employees. It cannot be determined at this time whether or not control measures are necessary for any of the orchards and if so, what control measures will be used. Therefore, the costs for this cannot be reduced.

The proposed quarantine will require that solid waste collection companies separate green waste. This would require companies to educate customers and residents on policy changes. WSDA has offered to mitigate the cost of this by funding residential mailers that are sent out, as well as assisting with the design of educational materials. WSDA has also provided educational handouts on apple maggot to disperse within the proposed quarantine area.

Additional costs to solid waste collection companies cannot be reduced due to findings in the PRA which concluded that, "the overall risk of entry of *R. pomonella* [apple maggot] on MGW [municipal green waste] from the quarantine area to the pest free area is assessed as likely to occur with low uncertainty." WSDA relied upon the findings and conclusions of the PRA in adopting the amendments of the quarantine rule. The PRA found that segregation of municipal green waste is essential to slow the possible movement of apple maggot into pest free areas. Based on these conclusions, it is necessary for solid waste collection companies to segregate waste and if required, obtain a special permit to transport waste into or through the pest free area.

RCW 19.85.030(2) requires consideration of the following methods of reducing the impact of the proposed amendment on small businesses:

*(a) Reducing, modifying, or eliminating substantive regulatory requirements –*

Over the last three years the increasing numbers of adult flies trapped in the Methow Valley suggested the apple maggot may have become permanently established there. However, in early 2017, the AMWG postponed recommending a quarantine in the hope that aggressive control actions by the Okanogan County Pest Board might eradicate

populations locally, thereby averting a quarantine. Control methods used included the removal of residential host trees, and abandoned orchards, and the application of insecticides. By the end of the 2017 trapping season, however, the discovery of multiple life stages gave evidence that a reproducing population of apple maggot was present, eradication was no longer an option and that a quarantine of the Methow Valley would be necessary to protect growers in the remaining pest free area.

Any reduction, modification, or elimination of the regulatory requirements of the proposed amendment could increase the risk of the entry of apple maggot into the pest free area according to the findings of the PRA. However, upon meeting with the private waste hauler and hearing their concerns over the proposed amendment, there has been discussion of exempting commercial food waste from specific businesses they service. These businesses include hospitals, hotels, grocery stores, and restaurants. The private waste hauler expressed great concern over segregating food waste from these businesses. The risk level for the entry of apple maggot on food waste from these businesses into the pest free area is considered low. Currently, no decisions have been made on this potential exemption, as further discussion is required.

*(b) Simplifying, reducing, or eliminating recordkeeping and reporting requirements –*

The proposed amendment does not specify any recordkeeping or reporting requirements for the small businesses discussed in this assessment. Record keeping and reporting is only required for organizations which apply for a Special Permit for the transport of MSW (municipal solid waste) from the apple maggot quarantine area to the pest free area.

*(c) Reducing the frequency of inspections –*

For apple orchards, inspections are only performed when an orchard is considered threatened and chooses to have WSDA CID inspect their fruit to determine if apple maggot is present. This is part of the apple maggot certification process and the inspection is free for the orchard. In most cases, only one inspection will be necessary to certify an orchard. Eliminating the single inspection would undermine and violate the quarantine order. No inspections will be conducted for the private waste hauler.

*(d) Delaying compliance timetables –*

Delaying compliance timetables will result in a higher risk for the entry of apple maggot into the pest free area. The findings of the PRA support this, by showing a high likelihood of apple maggot being transported on municipal green waste. By delaying compliance timetables, apple maggot will have greater opportunity to spread into the pest free area.

*(e) Reducing or modifying fine schedules for noncompliance –*

RCW 17.24.141 specifies the penalty for violating a quarantine order. Chapter 16-470 WAC does not address penalties for violations of the apple maggot quarantine. Reducing or modifying fine schedules would involve a legislative change and is not part of this rulemaking.

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**SECTION 7:**

**Describe how small businesses were involved in the development of the proposed rule.**

Over the past three years, there has been discussion with the Apple Maggot Working Group (AMWG) on partially quarantining Okanogan County. The AMWG includes members from the tree fruit industry, researchers, federal regulators, county extension, and WSDA. These members represent and speak for memberships that include small businesses.

WSDA has had direct conversations with small businesses in the area that could be impacted by the proposed quarantine. An attempt was made to contact apple orchards within the proposed quarantine area. However, only two orchards were successfully reached. The boundary and regulations of the proposed quarantine were discussed, as well as conditions of the apple maggot certification process. Additionally, multiple discussions have taken place with the small private waste hauling company. These discussions covered the boundaries and regulations of the proposed quarantine, as well as potential economic and operational impacts to the small waste hauling company.

In late February 2018, WSDA convened the AMWG to consider the proposed quarantine boundary. It was determined that the quarantine boundary was necessary to prevent the spread of apple maggot in the area.

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**SECTION 8:**

**Identify the estimated number of jobs that will be created or lost as the result of compliance with the proposed rule.**

The exact cost of compliance for apple orchards is difficult to determine. Apple orchards will not incur any costs from the apple maggot certification process. It is difficult to determine if any of the effected apple orchards will be considered threatened, and if so, what control measures they will implement. Therefore, an estimate of the number of jobs that will be created or lost, if any, cannot be determined at this time.

The exact costs of compliance for the impacted private hauling company known to transport municipal waste from the apple maggot quarantine area to the pest free area is difficult to determine, because it is unclear what logistical and operational changes will occur. Since the County is not a small business, it was not considered in this assessment. Therefore, an estimate of the number of jobs that will be created or lost, if any, cannot be determined at this time.