

I am a ...	What are my responsibilities under the Plan?	What are the changes from the status quo?	How, and who, will ensure I am meeting these responsibilities?	What will these changes cost me?	Will I be supported to help with implementation of these requirements?
<p>GROWER: There is a specific rule for growers in the Pathway Plan requiring them to complete and implement an orchard biosecurity plan. However, as growers are central to all plan requirements, they also have a responsibility to ensure all inputs into their orchard are compliant with rules of the plan. As a purchaser, growers are also well placed to drive behaviour change for better biosecurity outcomes and better protection of their investment.</p>					
<p>All growers</p>	<p>Growers are required to complete and implement a “Kiwifruit Orchard Biosecurity Plan” which at a minimum meets the following requirements:</p> <ul style="list-style-type: none"> • understanding the orchard-specific biosecurity risks • agreeing what must happen on the orchard (including establishing and ensuring biosecurity requirements to be met by people 	<p>Growers are currently required to have an orchard management plan for Psa-V. An on-orchard biosecurity template has been developed which growers are completing for KVH on a voluntary basis, as well as a Zespri GAP requirement.</p> <p>The Pathway Plan requirements for growers are aligned with this existing template, called the “Kiwifruit Growers Biosecurity Guidelines”. Therefore, if growers</p>	<p>As per the status quo, the need to have and implement an orchard biosecurity plan will continue to be required in order to supply fruit to Zespri (a Zespri GAP requirement).</p> <p>KVH will also undertake audits which may be targeted at:</p> <ul style="list-style-type: none"> • Zespri GAP non-compliance • growers outside of Zespri GAP • reports of non-compliance. <p>As per current practice, KVH will take</p>	<p>For growers who already have and operate in accordance to an orchard biosecurity plan there will be no cost in meeting the new rules.</p> <p>For other growers we expect time will need to be dedicated to implementation of their existing plan. The time associated with implementation will depend on their current state, but we estimate this should take no more than one day per year.</p>	<p>KVH has developed a template for growers to complete their on-orchard biosecurity guidelines and simplify compliance with this rule.</p> <p>Further support, if required, can be provided by KVH staff or growers’ post-harvest representatives. KVH has also provided training to GAP auditors so they can assist growers in meeting these requirements. This is already occurring in the current transition period.</p>

	<p>visiting the orchard)</p> <ul style="list-style-type: none"> • sourcing and tracing clean plant material • checking and cleaning risk items (e.g. tools, vehicles, machinery, bins, footwear, and clothing); and • reporting. <p>Growers will also be responsible for ensuring all inputs into their orchards are sourced from certified bodies (i.e. rootstock, budwood, pollen, mature plants, compost etc).</p>	<p>have adopted these guidelines there will be little change from the status quo from an administrative perspective.</p> <p>However, to date there has been little scrutiny of how growers are implementing these plans, and time may be required to improve on-orchard practices in line with their plan if this has not been done already.</p>	<p>an educative approach when following up with non-compliance, as the intent of these requirements is to protect grower's kiwifruit investments from biosecurity threats.</p>		<p>KVH will host workshops in 2021 to assist with the transition to new requirements under the Pathway Plan, including meeting this rule.</p> <p>KVH will maintain lists of suppliers (such as Kiwifruit Plant Certification Scheme - KPCS - certified suppliers of plant material) to support growers in sourcing material from only those who are compliant with the rules of the Pathway Plan.</p>
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BUDWOOD: There is a specific rule in the Pathway Plan that applies to every budwood supplier, requiring them to be certified by the management agency in order to ensure biosecurity risk is managed throughout the budwood supply chain (from management of risk on the source orchard, through to supply and then to end-user). Those who are using budwood on their own orchard and not moving budwood to other orchards are exempt from this rule.

<p>Budwood supplier/distributor</p>	<p>Persons who provide budwood to others have a responsibility to ensure the budwood has been sourced from an orchard compliant with the rules of the Pathway Plan. This includes ensuring source orchards are:</p> <ul style="list-style-type: none"> • aware of biosecurity risks • undertaking monitoring • testing (as required) • ensuring good hygiene practices are occurring, including cleaning tools • having selection best practice including not taking from 	<p>Currently requirements for all budwood suppliers include registering with KVH and operating under a risk management plan (RMP). KVH currently sights these plans and follows up to ensure movements are being recorded at the end of the season. This is also a Zespri GAP requirement that is audited annually.</p> <p>Key changes will include requirements around certification and testing, and the implementation of an auditing regime. Much of the criteria to meet certification are</p>	<p>KVH is actively working to expand the existing KPCS so it includes certification for kiwifruit budwood, with the intent that any kiwifruit budwood supplier that meets the requirements of this scheme will therefore satisfy the requirements of this rule.</p> <p>Growers supplying budwood will be required to document this as a Zespri GAP requirement and as part of their on-orchard biosecurity plan.</p>	<p>For growers there will be no cost for KPCS certification and audit, except where additional testing is required.</p> <p>For growers who are Psa non-detected (which is most budwood suppliers) the testing requirements are the same as the status quo at \$85 per block.</p> <p>In addition to these testing costs distributors will also need to cover the cost of audit (\$200).</p>	<p>The KPCS is a tool to simplify meeting these requirements. KVH provides support (at no additional charge for growers) to meet KPCS requirements which includes guidance material, phone discussions and site visits where required.</p> <p>KVH will host workshops in 2021 to assist with the transition to new requirements under the Pathway Plan, including meeting this rule.</p>
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	<p>ground and not from symptomatic vines</p> <ul style="list-style-type: none"> • reporting. <p>There must also be a robust system for tracing both forward and backwards from source orchard to end user.</p> <p>These requirements can be met through KPCS certification either as an individual supplier, or a distributor who sources budwood from 3rd party orchards and distributes to others (orchards).</p>	<p>already being met through the RMP, including monitoring and record keeping.</p> <p>Beyond the Zespri GAP control point and traceability there has been little scrutiny against how budwood suppliers operate against this plan.</p>	<p>KVH will independently audit some of these growers, targeting:</p> <ul style="list-style-type: none"> • Zespri GAP non-compliance • growers outside of Zespri GAP • reports of non-compliance. <p>KVH will audit all commercial distributors of budwood who source budwood from 3rd parties. This audit will verify that source orchards have met the necessary requirements.</p>		
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NURSERIES: There is a specific rule in the Pathway Plan that the movement of all kiwifruit plants and shelter belt plants to kiwifruit orchards must meet specific requirements, which can be achieved through KPCS or Plant Producers Biosecurity Scheme (PPBS) certification.

<p>Growing kiwifruit plants only</p>	<p>All kiwifruit nurseries are required to meet the following:</p> <ul style="list-style-type: none"> • hygiene practices must be in place that ensure all risk inputs into the nursery are cleaned and disinfected (tools, shoes, equipment etc) • source clean plant material and clean growing media (i.e. soil, potting mix, compost etc) • regular monitoring • testing must be carried out as required • traceability systems both forward and backwards. 	<p>Kiwifruit nurseries are currently required to have KPCS certification to move plants (there are currently just over 60 KPCS certified nurseries). For these nurseries there are no additional changes under the plan.</p>	<p>As per the status quo, certification under the KPCS will still be required.</p> <p>These nurseries will be independently audited annually, as specified by KVH.</p> <p>KPCS and PPBS certification both provide avenues for compliance against the requirements.</p>	<p>No additional costs.</p>	<p>KVH has invested significant time and effort into nurseries that fall under the KPCS are supported throughout their certification. This includes site visits, online support, best practice guidance, and annual meetings. These practices will continue under the Pathway Plan.</p>
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	By achieving KPCS certification nurseries will demonstrate compliance with these requirements.				
Growing kiwifruit plants and shelter plants	<p>The requirements for plant movements into kiwifruit orchards apply to kiwifruit and shelter belt plants. Therefore, these nurseries must have systems to capture both plant types.</p> <p>Nurseries can demonstrate compliance with the requirements through the KPCS and can extend this certification to include the shelter plant production portion of the nursery.</p>	A small portion of KPCS certified nurseries also supply shelter belt plants and would need to extend biosecurity requirements to include these plants where they are destined for kiwifruit orchards.	<p>As per the status quo, certification under the KPCS will still be required. However, this certification will extend to cover all shelter belt species grown within the nursery.</p> <p>These nurseries will continue to be independently audited annually, and costs will be covered by the nursery.</p>	A slight addition to the already established KPCS would result in a small initial administrative cost to implement systems.	KVH will support those meeting the changes through issuing approved standards and associated guidance in the areas covered by this rule. This includes approving any target organisms and monitoring methods, including timing, frequency, sampling, and testing (if applicable) methodology. Such methods must evolve to reflect changes in risk and available technology.

<p>Growing shelter plants only</p>	<p>Shelter belt nurseries will have similar responsibilities as those above, although the mechanism for meeting them will be slightly different.</p> <p>In practice, shelter plant nurseries will need to be able to identify, control, manage or avoid biosecurity risk in their nursery and production processes (similar to above).</p>	<p>KVH does not currently have requirements for those nurseries only providing shelter species, as they are not a host for Psa. As such, shelter only nurseries will demonstrate compliance with requirements of the Pathway Plan through an equivalent certification system, such as the PPBS.</p>	<p>KPCS certification will not be available to nurseries that only grow shelter belts (i.e. do not grow kiwifruit plants).</p> <p>An alternative cost-effective pathway will be available to such nurseries; plant producers that meet requirements of the PPBS will also satisfy the requirements of this rule as it applies to shelter belt species.</p> <p>The PPBS will be audited at a frequency specified by the management agency.</p>	<p>The cost for nurseries to meet PPBS certification will depend on current state of the nursery operation but New Zealand Plant Producers Incorporated (NZPPI) estimate this to be on average \$3500 for time to become certification ready, \$2500 for infrastructure upgrades and ongoing costs of \$2500 per year to maintain certification. However, for these nurseries the costs and benefits they derive from PPBS certification would apply to their entire operation, of which shelter plants may only be 5% or less.</p>	<p>NZPPI (as the lead agency for the PPBS) will provide support for nurseries to achieve these requirements in the form of guidance material and site visits where possible.</p>
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POLLEN: There is a specific rule in the Pathway Plan that applies to all aspects of the pollen supply chain (from source orchard through to the supply of pollen to the end-user/grower), requiring certification under the KPCS.

<p>Mill operator</p> <p>A person or business in charge of the pollen milling process</p>	<p>Mill operators have a responsibility for their own operational practices but must also ensure that flowers are only sourced from orchards who follow required practices. These would include:</p> <ul style="list-style-type: none"> • only accepting flowers from those certain to have the required biosecurity risk management practices are occurring • hygiene practices in place both at the orchard level and mill level • traceability is intact both forward and backwards from mill. 	<p>There are only minor changes proposed</p> <p>Currently an RMP is required and audited annually by KVH, which is a process that will be similar to the KPCS audit.</p> <p>Currently non-detected orchards supplying pollen provide assurance of Psa status by relying on regional status (for Exclusion regions), or voluntarily having a Psa test (if in Containment or Recovery). This testing is proposed to become mandatory for Psa non-detected source orchards only.</p>	<p>KVH is actively working to expand the existing KPCS so it includes certification for kiwifruit pollen, with the intent that any kiwifruit pollen mill operator that meets the requirements of this scheme will satisfy the requirements of this rule.</p> <p>KVH will audit all pollen mills.</p>	<p>An audit fee is proposed for mills to achieve consistency with other pathways. The cost of this fee is expected to be about \$200 per year.</p>	<p>KVH will support those meeting the changes through issuing approved standards and associated guidance in the areas covered by this rule. This includes approving any target organisms and monitoring methods, including timing, frequency, sampling, and testing (if applicable) methodology. Such methods must evolve to reflect changes in risk and available technology.</p>
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		Testing and monitoring requirements could evolve over time based on risk and science, but no additional testing is proposed at this point.			
<p>Pollen distributor</p> <p>A person or business that buys pollen from a pollen mill operator, or another pollen distributor, to on-sell to kiwifruit growers</p>	<p>Every pollen distributor is responsible for ensuring that they are registered and are only distributing certified pollen produced from a certified mill. In addition, they are also responsible for:</p> <ul style="list-style-type: none"> ensuring all pollen remains sealed and intact as received from the certified pollen mill maintaining pollen traceability records including where the pollen came from, transporters 	<p>No changes in requirements for pollen distributors – they will continue to be required to register with KVH and keep records for traceability requirements.</p>	<p>Registration with the management agency (KVH).</p> <p>At a minimum, there will be a paper-based auditing system to ensure that traceability records are being kept. This will be undertaken and managed by KVH.</p>	<p>No costs proposed.</p>	<p>Considering that there is little change to the status quo, it is expected that there will be little support required for pollen distributors to implement the rule.</p>

	used, and the orchard where the pollen will be used.				
<p>POST-HARVEST AND KIWIFRUIT PROCESSORS: The specific rule under the Pathway Plan requires post-harvest and processors to have and operate in accordance with a biosecurity plan. This rule applies to every business that provides services to the kiwifruit industry in relation to the harvesting, sorting, packing, cool storage and/or processing of kiwifruit. Post-harvest can be central to several other Pathway Plan requirements and so have a responsibility to ensure all other rules of which they are involved are being adhered to (i.e. pollen distribution, budwood supplier).</p>					
<p>All post-harvest and kiwifruit processors</p>	<p>Post-harvest and processors must have and operate in accordance with a “Kiwifruit Post-Harvest and Processor Biosecurity Plan”.</p> <p>This plan will ensure that practices and procedures will be applied to manage:</p> <ul style="list-style-type: none"> • hygiene practices for goods going on and off a post-harvest facility • sanitisation of harvest bins prior to season • risk of kiwifruit bins (i.e. plant material/soil contamination) • risk of kiwifruit plant material 	<p>The requirement for a biosecurity plan under the Pathway Plan is equivalent to the current requirement for a RMP under the National Psa-V Pest Management Plan (NPMP).</p>	<p>Registration with the management agency (KVH).</p> <p>KVH will maintain protocol and pro-forma “systems audit reports” that assist post-harvest operators and processors to comply with this rule. These will also address/accommodate other rules under the Pathway Plan that must be complied with (excluding rules relating to plant material and the KPCS) – this provides for a</p>	<p>As there is no KVH charge for status quo audits and no new KVH charge for future audits proposed there is unlikely to be any change in costs/savings for post-harvest or processors.</p>	<p>As the current requirement is equivalent to the proposed plan, it is expected that there will be little support needed for new requirements for post-harvest and processors.</p>

	<p>left over from processing</p> <p>Post-harvest may also have other requirements for various rules within their plan, but their responsibilities and compliance will still be managed against each specific rule (i.e. pollen distributor or budwood supplier).</p>		<p>single biosecurity risk management plan and associated audit.</p> <p>KVH will continue to audit post-harvest and processors on an annual basis.</p>		
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CONTRACTORS: There is a specific rule in the Pathway Plan that requires all contractors (meaning any person or entity that supplies goods or services to kiwifruit growers that involve the movement of any risk items into, within or from a kiwifruit orchard) to complete and operate in accordance with a Kiwifruit Contractor Biosecurity Plan and implement the intent of this rule.

<p>CAV contractors</p> <p>This covers all spray, fertiliser, harvest, and vine maintenance contractors</p>	<p>Contractor responsibilities include having and operating with a “Kiwifruit Contractor Biosecurity Plan”.</p> <p>In practice, this will likely involve:</p> <ul style="list-style-type: none"> understanding the pathway risks needing to be managed 	<p>Contracting companies and all associated employees will be required to have a “Contractor Biosecurity Plan” that outlines their risk pathways and how these will be managed.</p> <p>There are currently 410 contractors operating under the</p>	<p>KVH is actively working with other parts of the industry to establish opportunities to integrate biosecurity within existing contractor assurance and verification processes (i.e. Zespri CAV accreditation).</p>	<p>The cost of including biosecurity requirements within the CAV may increase the cost of audit by up to \$100.</p> <p>There will be ongoing costs of implementing biosecurity best practice such as cleaning between</p>	<p>There will be an online training module developed as part of the certification process by the management agency (KVH).</p> <p>KVH also intends to support access to tools that help with ease of compliance (e.g. online staff training video and</p>
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	<ul style="list-style-type: none"> • understanding the hygiene requirements before entering a kiwifruit orchard • reporting. 	<p>Zespri CAV system. There will be control points within this CAV system to ensure that the requirements of the plan are being met.</p> <p>Currently, contractors are not a managed pathway outside of the Psa requirements around hygiene and cleaning. There has been little scrutiny into contractor adherence current hygiene requirements.</p>	<p>There is also a control point within Zespri GAP to ensure CAV evidence is presented to the grower prior to undertaking orchard work.</p> <p>KVH will undertake audits which may be targeted at:</p> <ul style="list-style-type: none"> • Zespri GAP non-compliance • contractors that fall outside the CAV • reports of non-compliance. 	<p>orchards, which while required under the status quo would likely represent a change.</p>	<p>alignment with the OnSide app that helps properties manage visitors, biosecurity, and health and safety).</p>
<p>Non-CAV contractors This will cover all contractors that fall outside the CAV process</p>	<p>Contractor responsibilities include actively managing biosecurity risks with a plan and that includes biosecurity hygiene and having staff biosecurity awareness and training programmes.</p>	<p>Contracting companies and all associated employees will be required to have a “Contractor Biosecurity Plan” that outlines their risk pathways and how these will be managed.</p>	<p>All contractors that fall outside the above accreditation scheme will need to register with the management agency (KVH), complete an RMP and undertake an online training component to become certified.</p>	<p>There will be ongoing costs of implementing biosecurity best practice such as cleaning between orchards, which while required under the status quo would likely represent a change.</p>	<p>There will be an online training module developed as part of the certification process by the management agency (KVH).</p> <p>KVH also intends to support access to tools that help with ease of compliance (e.g. online</p>

			<p>KVH will undertake audits of these contractors which may be targeted at:</p> <ul style="list-style-type: none"> • level of risk • reports of non-compliance. 		<p>staff training video and alignment with the OnSide app that helps properties manage visitors, biosecurity, and health and safety).</p>
<p>COMPOST, MULCH, SOIL: There are specific rules under the Pathway Plan that require all compost, mulch, and soil to be free of leafy kiwifruit plant material and high-risk organisms.</p>					
<p>Compost, mulch, and soil All persons or businesses supplying compost, mulch, or soil for use on a kiwifruit orchard</p>	<p>Responsibilities include ensuring that any compost, mulch, or soil being moved onto an orchard must not contain leafy kiwifruit plant material and must be free from high-risk pests and diseases.</p>	<p>This builds on an existing requirement, but is outcome based and requires freedom from a range of high-risk organisms which has not previously been required.</p> <p>This will likely be achieved through current composting procedures where temperatures will exceed the threshold of which most organisms could survive.</p>	<p>KVH will audit compost providers and issue permissions.</p>	<p>Considering that there is little change to the status quo, it is expected that there will be no cost to businesses supplying compost, mulch, or soil.</p>	<p>Considering that there is little change to the status quo, it is expected that there will be little support required for persons or businesses supplying compost, mulch, or soil.</p>
<p>Other audiences considered but not included as there were no significant changes from the status quo: Landowners with wild kiwifruit; Researchers; Regional Councils; Transporters.</p>					