Australian Government
Department of Agriculture, Fisheries and Forestry

Improving cost recovery for regulatory diagnostic activities



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We acknowledge the continuous connection of First Nations Traditional Owners and Custodians to the lands, seas and waters of Australia. We recognise their care for and cultivation of Country. We pay respect to Elders past and present, and recognise their knowledge and contribution to the productivity, innovation and sustainability of Australia's agriculture, fisheries and forestry industries.

Summary

In 2023 the Department of Agriculture, Fisheries and Forestry reviewed the regulatory diagnostic activities it uses to assess and manage biosecurity risks associated with goods and international vessels and aircraft, including pest identification, disease testing and examination. The review identified instances where we did not charge, or only partially charged, for these activities, and opportunities to improve cost recovery.

To support ongoing sustainable funding, we are improving cost recovery for diagnostic activities in 2026–27, through a phased approach that will enable us to charge for regulatory diagnostic activities necessary to assess and manage biosecurity risks associated with goods and conveyances.

- **Phase 1** – Introduced new charges to recover the cost of diagnostic activities undertaken to manage biosecurity risks associated with international vessels entering Australian territory.
- **Phase 2** – Revise the existing fee structure and introduce fixed fees for most diagnostic activities undertaken for imported cargo.

We originally planned to commence the changes in 2025, but delayed implementation due to the complexity of vessel and cargo pathways and the need to enhance billing systems to ensure transparent and consistent charging. We now propose to implement the changes in 2 phases across 2026–27.

Phase 1 commenced on 1 July 2026 with the introduction of charges to recover the cost of diagnostic activities undertaken to manage biosecurity risks associated with international vessels. Subject to further approval of legislative amendments, Phase 2 is expected to commence on 1 November 2026.

The revised charging approach better reflects the complexity of biosecurity pathways, improves price certainty and transparency, and supports more consistent billing. It minimises the impact on industry while allowing us to recover the cost of diagnostic activities critical to managing biosecurity risks associated with goods and conveyances.

Some importers may pay more, particularly where we previously did not charge, or only partially charged, for diagnostic activities, including certain fresh produce and vessel inspection activities.

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1 Rationale for change

The 2023 review identified gaps in charging for diagnostic activities, confirming we have not been recovering the costs of delivering the regulatory activities that should be charged for under the current arrangement. The cumulative impact amounts to a gap in recovery of our costs. For example, we identified instances where no fees have been applied, or importers were only charged for 2 × 15-minute intervals ($84, current 2026–27 rates), which does not reflect the actual effort or cost to undertake diagnostic activities.

The current charging approach did not:

- reflect the complexity of import pathways
- provide clear or predictable pricing for industry
- recognise the highly variable and technical nature of diagnostic work, compared to other regulatory activities such as inspections or document assessment.

The revised charging aims to address these matters and provide greater transparency and price certainty, while ensuring fees recover the actual cost of delivering the activity.

2 Phase 1 New international vessels charges

We introduced 2 charges to recover the cost of diagnostic activities required to assess and manage biosecurity risks associated with international vessels.

The charges provide a more effective way to recover the cost of regulatory activities already undertaken for vessels.

- Time-based fees no longer apply to diagnostic activities undertaken for vessels.
- The charges recover the cost of delivering these regulatory activities.
- A one-off charge applies per vessel when diagnostic activity is required during a voyage in Australian territory.

The charges are prescribed in Part 2, section 9 of the Biosecurity Charges Imposition (Customs) Regulation 2016 and the Biosecurity Charges Imposition (General) Regulation 2016.

The charges commenced on 1 July 2026.

2.1 Calculation of the new charges

We used validated data on volumes, effort and cost to deliver diagnostic activities to calculate the charges for each category.

We set charges to reflect the minimum efficient cost of delivering the diagnostic activities required to resolve biosecurity risks and will review rates annually to ensure they remain aligned with these costs.

2.2 Application of the charge

The one-off charge applies per vessel, per voyage in relation to diagnostic activity required to assess and manage biosecurity risk.

- The current rate is published on our website
- The charge will be applied once per vessel, per voyage and itemised on an invoice.

Table 1 sets out the new charge categories and rates.

Table 1 Charges for diagnostic activity in relation to vessels

Category	Application	Unit	2026–27 Rate ($)
International Roll-on/Roll-off (Ro-Ro) cargo vessel	One off charge applied in relation to diagnostics activity to assess and manage biosecurity risk.	Per vessel	710
International vessel other than a Ro-Ro cargo vessel	One off charge applied in relation to diagnostics activity to assess and manage biosecurity risk.	Per vessel	189

The distinction between the 2 categories is based on the effort and cost to deliver diagnostic activity. Larger numbers of specimens are typically collected from Ro-Ro cargo vessels during inspections,

when compared to other types of vessels. Samples collected from Ro-Ro vessels also contain greater diversity and can require complex assessment relating to seasonal pest measures. Consequently, these vessels require significantly more diagnostics effort to assess and manage biosecurity risk.

Scenarios

Scenarios 1 and 3 explain how the charges apply in different situations where diagnostic activity is required to assess and manage biosecurity risk in relation to an international vessel.

Scenario 1 Yacht with pests in cabin

During an inspection of a wooden yacht that has sailed into Australian waters an officer finds live ants and a spider in the cabin. The officer takes a sample and submits it for diagnostic assessment. Examination under a stereo microscope confirmed the spider to be *Steatoda grossa* and the ants to be minor workers of the genus *Pheidole*. Further morphological identification is performed using identification keys/literature and comparison of a series of specimens from the sample against reference images and specimens, resulting in a species level identification of *Pheidole parva*.

In this scenario a one-off charge of **$189** would apply.

Scenario 2 Pests on a Ro-Ro cargo vessel

A sample from an inspection of a Ro/Ro cargo vessel with imported vehicles and machinery, which resulted in detection of 35 insect specimens, along with a second sample of 20 insect specimens collected by the crew during the voyage, both samples are submitted for diagnostic assessment. Examination of the samples under stereo microscopy identifies 9 species, including: 3 species of stink bug, 1 grasshopper, 1 cockroach, 2 species of lady beetle, 1 dragon fly, and 1 wasp. Two of the stink bug species require dissection for morphological identification. All stink bug, lady beetle and grasshopper specimens in both samples are screened for freshness, and the species are matched spatially to decks and holds on the vessel to inform advice on the application of appropriate biosecurity measures.

In this scenario a one-off charge of **$710** would apply.

Scenario 3 Container vessel with pests in dry store

During a routine vessel inspection of a container vessel an officer finds live larvae and exuviae in the galley dry store. A sample is taken which is sent to the department's laboratory. Examination under a stereo microscope indicates the specimens are larvae and larval skins in the family Dermestidae, which includes high risk pests such as khapra beetle. The specimens require slide mounting for further morphological identification and a species level determination of *Eurhopalus vespulae* is confirmed.

In this scenario a one-off charge of $**189** would apply.

3 Phase 2 Revised fee structure for imported goods

The proposed fee structure provides a more effective way to charge for regulatory activities already delivered under the current cost recovery arrangement.

New charge points will be added to the legislation for diagnostic activities. Each charge point will specify:

- the activity
- the applicable rate
- how the fee is charged, such as for each test, examination or activity.

This will be achieved through a structural change to legislation, with new fees included under section 83 of the Biosecurity Regulation 2026.

Subject to approval of legislation, implementation of the revised fee structure is proposed to commence on **1 November 2026**.

Table 2 provides a comparison of the key differences between the current and proposed fee structures.

Table 2 Comparison of current and proposed fee structure for imported goods

Category	Current fee structure	Revised fee structure
Fee structure	Unspecified broad category for all fees listed as 'diagnostic activity.'	Most individual tests or activities specified as separate prescribed fees for each test or activity.
Cost for diagnostic activity	Calculated per 15-minute intervals plus the cost of any consumable material required.	Flat rate for each activity specified in legislation.
Legislated units	Rate prescribed for 15-minute intervals for each person carrying out the activity.	Rate prescribed for individual activity with a description of what it covers, and the rate at which the activity is charged per unit. Includes a tiered structure for some tests.
Billing	Not all activities are or can be easily itemised on invoices.	Each activity can be itemised on an invoice.

3.1 Charging for unspecified activities

Diagnostic activities that are not specified as fixed fees will continue to be charged in 15-minute intervals, plus the cost of any consumable materials required. This reflects the variable and complex nature of the work. Examples include collating and analysing data and generating reports (see Scenarios).

New tests or activities may be added as the effort and costs involved are validated.

3.2 Calculation of revised fees

We reviewed the diagnostic activities we conduct, captured and validated data collected on the volumes, effort and cost to deliver these activities, and used this information to calculate the proposed fees for individual activities.

The fee for each activity has been calculated using the actual time taken to undertake the activity, in minutes, plus the cost of any consumable materials required.

Fees will be reviewed as a part of the annual review of regulatory charges to ensure time taken and fees charged continue to align with the cost of each activity.

3.3 Application of fees

Under the revised structure, we will charge an individual fee for each diagnostic activity undertaken in relation to imported goods (Table 3). The total cost will depend on the number and type of activities required.

The revised fee structure provides greater transparency and price certainty while ensuring fees recover the cost of delivering each activity:

- Most diagnostic activities, including tests and examinations, will have a legislated fee. We will publish current rates on our website so importers can generally know the price in advance.
- A tiered structure will apply to some tests, reducing the fee per test when we test larger numbers in one batch.
- Changes to some activity fees may increase or reduce costs for importers.

3.4 Billing

Under the revised fee structure, we will change how we bill for diagnostic activities relating to goods. Diagnostic fees will no longer appear on the same invoice as other biosecurity charges. We will issue a separate invoice for diagnostic activities.

- The fee for each diagnostic activity undertaken will be itemised on an invoice.
- Invoices will generally be issued on completion of all diagnostic activities.
- If further diagnostic work is required, we may issue an additional invoice.

3.5 Transitional arrangements

The charges that apply will depend on when we undertake the diagnostic activity. We will apply the current time-based fees to activities completed before the revised fee structure commences and the new fixed fees to activities undertaken on or after the commencement date.

Where diagnostic work spans the commencement date, an invoice may include both current and new charges. We will charge additional diagnostic activities undertaken on or after commencement under the revised fee structure.

The revised fees will not apply retrospectively to diagnostic activities completed before commencement.

3.6 Proposed specified diagnostic activities

Table 3 sets out the proposed new charge points for diagnostic activities including a description of the activity, the unit to which the fee will apply, and the price, calculated using 2026–27 rates.

Table 3 Proposed charge points and prices for specified diagnostic activities

Diagnostic activity	Description of activity	Unit	2026–27 price ($)
Sample handling	Receive and handle a sample, including one or more of the following: a) labelling the sample b) prioritising the sample c) repackaging the sample d) preserving the sample e) undertaking data entry in relation to the sample f) recording and communicating diagnostic results and associated advice on biosecurity risk and biosecurity measures in respect of the sample g) storing the sample h) disposing of the sample.	For each sample	84
Specialist sample collection	Collect and package a sample that requires specialist skills in pest or symptom recognition.	For each sample	9
Basic examination	Carry out a basic examination of a sample, including making clinical observations in relation to the sample and one of the following: a) a visual examination of the sample b) a simple microscopic examination of the sample, other than an examination involving slide mounting of the sample c) a visual and simple microscopic examination of the sample, other than a microscopic examination involving slide mounting of the sample.	For each examination	18
Intermediate examination	Carry out an intermediate examination of a sample, including an examination of the sample as described in a basic examination and one or more of the following: a) slide mounting of the sample b) simple dissection of the sample c) humidification or incubation of the sample d) imaging of the sample, or symptoms of the sample e) undertaking morphological identification procedures in relation to the sample.	For each examination	130
Complex examination	Carry out a complex examination of a sample, including an examination of the sample as described in the intermediate examination and one or more of the following: a) sourcing diagnostic literature required for identification of, and resolution of biosecurity risk in relation to, the sample b) sourcing assistance from external taxonomic experts in relation to the sample c) preparing and sending the sample, or part of the sample, to one or more external locations d) undertaking internal or external consultation to determine biosecurity risk or appropriate biosecurity measures in relation to the sample	For each examination	340

Diagnostic activity	Description of activity	Unit	2026–27 price ($)
	e) performing a complex dissection of a sample to determine its sex, reproductive potential or morbidity status.		
Rapid antigen test (RAT) – single	Carry out a RAT that detects a single species or group of species including sampling the affected material, preparing the sample, adding the test strip, recording the results of the test and disposing of the test.	For each test	42
RAT – multiple	Carry out a RAT that detects multiple species or groups of species, using a single test comb, including sampling the affected material, preparing the sample, adding the test strip, recording the results of the test and disposing of the test.	For each test	58
Microbial culturing - initial plating	Carry out the initial step for isolation of microorganisms, which includes initial plating.	For each activity	30
Microbial culturing - isolation	Carry out sub-culturing of a microorganism to obtain a pure isolate, excluding initial plating and identification.	For each activity	32
Sheppard & Needham wash test	Conducting a Sheppard & Needham wash test to detect *Verticillium alfalfae* in lucerne seed, including sampling, washing, culturing microbes, incubating cultures, and screening cultures.	For each seed variety tested	1,784
Nucleic acid extraction	Carry out an extraction of nucleic acid from a sample, either manually or robotically without purification.	For each extraction	41
Nucleic acid extraction and purification - 1 to 2	Carry out an extraction and purification of nucleic acid from a sample, either manually or robotically.	For each extraction and purification where 1 to 2 are carried out at the same time	107
Nucleic acid extraction and purification - 3 to 10	Carry out extraction and purification of nucleic acid from a sample, either manually or robotically.	For each extraction and purification, where 3 to 10 are carried out at the same time	64
Nucleic acid extraction and purification - 11 or more	Carry out extraction and purification of nucleic acid from a sample, either manually or robotically.	For each extraction and purification, where 11 or more are carried out at the same time	49
Loop–mediated amplification (LAMP) test – single sample or first sample in a batch	Carry out a LAMP test of a single sample or the first sample in a batch.	For each test, including controls	149
LAMP test – each additional sample in a batch	Carry out a LAMP test of each additional sample in a batch.	For each test excluding controls	43
Polymerase chain reaction (PCR) or quantitative polymerase chain reaction (qPCR) – 1 to 2	Carry out a PCR or qPCR activity.	For each activity where 1 or 2 are carried out at the same time	86
PCR or qPCR – 3 to 10	Carry out a PCR or qPCR activity.	For each activity, where 3 to 10 are carried out at the same time	35
PCR or qPCR – 11 or more	Carry out a PCR or qPCR activity.	For each activity, where 11 or more are carried out at the same time	13
Deoxyribonucleic acid (DNA) sequencing	Carry out sequencing of amplified DNA, derived from a sample of extracted and amplified DNA, excluding	For each sequencing	109

Diagnostic activity	Description of activity	Unit	2026–27 price ($)
	matching to species in online databases, and analysis of sequence data.		
Electron microscopy	Carry out electron microscopy of a sample, including sample preparation and analysis of results.	For each activity	236
Nematode extraction	Carry out an extraction of nematodes from a sample of soil or plant material, excluding tests to identify the species present.	For each extraction	225
High throughput sequencing of small ribonucleic acid (RNA)	Carry out high throughput sequencing of small RNA from a sample of plant tissue, including analysis of small lengths of RNA, excluding RNA extraction.	For each sequencing	656
Herbaceous indexing	Carry out herbaceous indexing, including inoculating indicator plants using plant tissue from the tested plant, inoculating positive and negative control plants and observing symptoms in the indicator plants.	For each plant tested	90
Woody indexing	Carry out woody indexing, including inoculating indicator plants by grafting tissue from the tested plant onto the indicator plant, grafting negative and positive control plants and observing symptoms in the indicator plants.	For each plant tested	238
Shoot tip grafting	Carry out shoot tip grafting, including preparing a seedling rootstock, grafting a shoot tip from the tested plant onto the seedling and monitoring growth.	For each grafting attempt	94
Enzyme-linked immunosorbent assay (ELISA) extraction	Carry out an ELISA extraction on a sample of plant tissue in preparation for carrying out an ELISA test, including reagent preparation and grinding plant tissue in a buffer bag.	For each extraction	10
ELISA test - 1 to 2	Carry out an ELISA test on an extract of plant tissue, including incubating the extract with antibodies in a test plate and analysing the results.	For each test, where 1 to 2 are carried out at the same time	164
ELISA test - 3 to 10	Carry out an ELISA test on an extract of plant tissue, including incubating the extract with antibodies in a test plate and analysing the results.	For each test, where 3 to 10 are carried out at the same time	51
ELISA - 11 or more	Carry out an ELISA test on an extract of plant tissue, including incubating the extract with antibodies in a test plate and analysing the results.	For each test, where 11 or more are carried out at the same time	21
Nucleic acid quality check	Carry out a nucleic acid quality check of a sample, including assessing the quality and quantity of RNA or DNA extracted from the sample and preparing a sample of the extracted product for analysis in an automated analysis instrument.	For each activity	11
Complementary deoxyribonucleic acid (cDNA) synthesis	Carry out the synthesis of cDNA from RNA extracted from a sample.	For each activity	14
Matrix–assisted laser desorption/ionisation time-of-flight (MALDI ToF) test	Carry out a MALDI ToF mass spectrometry test of a sample, including handling, preparing and testing the sample and analysing the results.	For each test	29

Note: The intermediate examination fee includes all activities described in the basic examination, and a complex examination fee includes the activities described in the intermediate examination. Therefore, one type of examination fee is applied for the examination needed to assess the biosecurity risk of the sample.

4 Scenarios

Scenarios 4 to 9 explain how the proposed fee structure would apply in different situations where diagnostic activity, such as testing, examination and pest identification, is required to assess and manage biosecurity risk. The examples do not represent all possible diagnostic scenarios, because activities required to resolve biosecurity risk will vary according to the nature of the goods or organisms present.

If an importer of goods is provided with preliminary diagnostic results indicating a potential biosecurity risk, they may elect to have biosecurity measures applied for release of the goods based on the potential risk identified at that point in time. If diagnostic activities cease, no further fees will be applied.

If the importer elects to continue to have the goods secured pending further diagnostic testing to resolve the biosecurity risk, then additional fees will be applied for that testing.

For goods that require testing for plant pathogens as part of the import conditions, fees will be applied for all mandatory testing and, if required, to resolve the cause of disease symptoms observed during inspection or post entry quarantine.

Scenario 4 Imported fresh fruit with disease symptoms

A sample of fresh oranges with white fungal growth is submitted for diagnostic assessment. Examination under a stereo microscope confirms the presence of a species of the fungus *Penicillium*.

One sample handling fee and one basic examination fee apply in this scenario, as all fruit submitted had the same symptoms. The sample includes one sample with a single symptom evident, therefore only one examination is required.

Fees for imported fresh fruit with disease symptoms

Activity	Price ($)
Sample handling (1 × sample)	84
Basic examination (1 × examination)	18
Total cost	**102**

Scenario 5 Imported rice with insect pests

A sample of insects is submitted for diagnostic assessment following an inspection of a consignment of rice. Examination under a stereo microscope identifies 2 species of beetle in the sample, *Lasioderma serricorne* and *Tribolium castaneum*.

One sample handling fee and 2 basic examination fees are applied in this scenario. Because there are 2 different beetles in the sample, a basic examination applies to each specimen.

Fees for imported rice with insect pests

Activity	Price ($)
Sample handling (1 × sample)	84
Basic examination (2 × specimens)	2 × 18 = 36
Total cost	**120**

Scenario 6 Imported cut flowers, pests, disease and weed seeds

Three samples are submitted for diagnostics assessment following an inspection of fresh flower stems, including stems with disease symptoms, live pests and contaminating seeds.

Sample 1 – Disease symptoms

Stems with disease symptoms on the leaves are examined under a stereo microscope. Slides of the fungi on the leaf surface are prepared for high-power microscopy. The fungi are identified by their morphology as *Sphaerotheca pannosa* (powdery mildew) and a species of *Cladosporium* (sooty mould). One sample handling fee and one intermediate examination fee apply because the sample contains a single symptom type and requires one examination.

Sample 2 – Live pests

The pests are examined under a dissecting microscope and identified as a spider mite (*Tetranychus sp*.) and a predatory mite (*Neoseiulus barkeri*). Identification of the predatory mite requires slide mounting and additional morphological examination. One sample handling fee, one basic examination fee and one intermediate examination fee apply.

Sample 3 – Contaminating seeds

The seeds are examined under a dissecting microscope and identified as a species in the genus *Erigeron* and a species in the genus *Oxalis*. One sample handling fee and 2 basic examination fees apply because 2 seed specimens require examination.

A range of fees apply in this scenario based on 3 samples being submitted, with one or more specimens requiring separate examination.

Fees for imported cut flowers, pests, disease and weed seeds

Specified activity	**Price ($)**
Sample handling (3 × samples)	3 × 84 = 252
Intermediate examination (fungi)	130
Basic examination (*Tetranychus* mite)	18
Intermediate examination (predatory mite)	130
Basic examination (seeds – 1 × *Erigeron*, 1 × *Oxalis*)	2 × 18 = 36
Total cost	**566**

Scenario 7 Imported fruit with multiple disease symptoms

A sample from a consignment of fresh stone fruit is submitted for diagnostic assessment following the detection of multiple disease symptoms during inspection. The submission consists of two sub-samples: fruit with mottled discolouration and fruit with lesions and mould growth. The cause of the symptoms is unknown and requires investigation.

Sub-sample 1 – Tissue with mottled discolouration

The material with mottled discolouration is tested using rapid antigen tests for 3 different viruses and all are negative. Transmission electron microscopy on 2 of the 5 sub-samples (sub-sample 1 A-E) of whole fruits with the symptoms of mottled discolouration, confirms the presence of virus particles consistent with the potyvirus family. RNA is then extracted from each of the 5 fruits, amplified by PCR, and sequenced to identify the virus. Analysis of the sequencing results takes 1 hour. Given the complexity of the disease issues, including detection of a potyvirus not previously detected, considerable time is spent researching literature and assessing the risk.

Sub-sample 2 - Fruit with lesions and mould growth

The symptoms on the fruit are examined under a dissecting microscope and slides of the lesions are prepared for examination using high-power microscopy. Bacteria are observed in the tissue from the lesions. Fungi consistent with the genus *Colletotrichum* are detected. The importer is advised that there are concerns about the disease symptoms and agrees to secure the goods pending further diagnostics to resolve the risk.

Initial plating to isolate bacteria is conducted and the next day 6 colonies are tested with MALDI-ToF mass spectrometry, which indicates one colony to be a genus (*Pantoea*) that includes pathogenic plant species. The colony indicated to be *Pantoea* is then isolated as a pure culture, and the species is confirmed to be *P. agglomerans* with MALDI-ToF mass spectrometry.

Initial plating to isolate the fungus is conducted and 2 days later the genus *Colletotrichum* is confirmed with MALDI-ToF mass spectrometry. The fungus is then isolated in pure culture, and DNA is extracted, amplified and sequenced to confirm the species (*Colletotrichum plurivorum*).

A range of fees apply in this scenario due to the multiple symptoms observed, the number of diagnostic activities required to identify the pathogens present, and the additional analysis needed to assess and manage the biosecurity risk.

Fees for imported fruit with multiple disease symptoms

Category	Activity	Price ($)
Specified activity	Sample handling (1 × sample)	84
	Intermediate examination (Sub-sample 2, fungi and bacteria)	1 x 130 = 130
	Complex examination (Sub-sample 1 - viral symptoms)	340
	Microbial culturing (initial plating: 1 × bacteria plate, 1 × fungi plate)	2 × 30 = 60
	MALD ToF (6 × bacterial colonies, 2 × fungal colonies)	8 × 29 = 232
	Microbial culturing – isolation of bacteria or fungi in pure culture (1 × bacterium isolate, 1 × fungus isolate)	2 × 32 = 64
	MALDI ToF (1 × bacterium isolate, 1 × fungus isolate)	2 × 29 = 58
	Nucleic acid extraction with purification – 1 to 2 samples (1 × fungus isolate)	107
	PCR – 1 to 2 samples (1 × fungus isolate, 2 × gene regions)	2 × 86 = 172
	DNA sequencing (2 × fungal gene regions)	2 × 109 = 218
	Rapid antigen test – single target (3 × targets)	3 × 42 = 126
	Electron microscopy (2 of 5 sub-samples)	2 × 236 = 472
	Nucleic acid extraction with purification – 3 to 10 samples (5 × subsamples)	5 × 64 = 320
	Complementary DNA (cDNA) synthesis (5 × extracts)	5 × 14 = 70
	PCR– 3 to 10 samples (Potyvirus generic primer 5 × cDNA)	5 × 35 = 175
	DNA sequencing (5 × amplicons)	5 × 109 = 545
Unspecified activity	Diagnostic in-office fee per quarter hour (1-hour, fungal sequencing analysis)	4 × 42 = 168
	Diagnostic in-office fee per quarter hour (1-hour, viral sequencing analysis)	4 × 42 = 168
	Diagnostic in-office fee per quarter hour (30 minutes, for other activities related to finalising diagnostic work such as compiling reports)	2 × 42 = 84
Total cost	**–**	**3,593**

Scenario 8 Potato tissue culture in post entry quarantine

A consignment of tissue cultured potato, with 8 replicate containers for each of the 3 cultivars arrives at the Post-Entry Quarantine (PEQ) facility. An examination of each container confirms the absence of disease symptoms, which takes 45 minutes to complete.

One container from each of the 3 cultivars is selected and reworked, by transferring plantlets to fresh growth medium.

A single, suitable plantlet from each re-worked cultivar is deflasked for growth in the glasshouse (3 plants). During the PEQ period (6 months) the plants undergo a basic examination monthly.

After 3 months the plants undergo a specialist sample collection, for nucleic acid extraction, with complementary DNA synthesis (from RNA), followed by PCR for housekeeping genes and PCR tests for 25 target-pathogens.

During their time in PEQ, each cultivar is reworked into fresh containers 3 times (in-office fee per 15 minutes applied). The plants in the glasshouse and all the tissue culture plantlets from each cultivar have final visual inspections and 6 plantlets from each cultivar are selected for release. As all testing is completed with no detections, the consignment is ready for release after 6 months and a testing report is created.

A range of fees are applied for this scenario, at different times during the quarantine period.

Fees for potato tissue culture in PEQ

Category	Activity	Price ($)
Specified activity	Sample handling (3 × cultivars on arrival)	3 × 84 = 252
	Basic examination (3 × cultivars × 6 occasions, monthly inspection 18 in total)	18 × 18 = 324
	Specialist sample collection (3 × cultivars)	3 × 9 = 27
	Nucleic acid extraction with purification – 3 to 10 samples (3 × RNA, 3 × DNA)	6 × 64 = 384
	Complementary DNA (cDNA) synthesis (3 × 3 RNA, 9 units in total)	9 × 14 = 126
	PCR – 3 to 10 samples (3 × DNA extracts and 3 × cDNA products, 'housekeeping' gene)	6 × 35= 210
	PCR – 3 to 10 samples (25 tests × 3 plants, separate run for each test applicable rate is for 3 to 10 samples)	75 × 35 = 2625
	Basic examination (3 × cultivars – finalise for release)	3 × 18 = 54
Unspecified activity	Diagnostic in-office fee per quarter hour (3 hours and 30 minutes, for other activities related to finalising diagnostic work such as compiling reports)	14 × 42 = 588
	Diagnostic in-office fee per quarter hour (on arrival inspection of plants, 45 minutes)	3 x 42 = 126
	Diagnostic in–office fee per quarter hour (tissue culture reworking (3 x cultivars × 4 times, 12 units in total)	12 x 42 = 504
Total cost	–	**5,220**

Scenario 9 Stone fruit budwood in PEQ

A consignment of 15 cultivars of Prunus (with 10 budwood sticks of each) arrives at the PEQ facility. All budwood sticks undergo on arrival examination, with no signs of disease observed. This takes 1 hour to complete.

A suitable bud stick from each of the of the 15 cultivars is selected for propagation and is sampled for on-arrival, prescribed testing, including microbial culturing for *Phytophthora*, and nucleic acid extraction before PCR testing for *Phytophthora* and *Erwinia amylovora*, with no detections.

Thirty plants are established in the glasshouse, as 2 replicate-grafts onto rootstocks, and all 30 plants undergo a basic examination monthly. When the plants display active growth, the 30 grafted plants undergo a specialist sampling collection for ELISA testing (2 target pathogens) and the samples from replicate plants are pooled before ELISA extraction and testing.

At a later stage, the 30 grafted plants undergo a different specialist sampling collection for nucleic acid extraction (replicate plants are pooled), quality checks and high-throughput sequencing of small RNA for viruses and viroids. No pathogens of concern are detected by either the ELISA or small RNA sequencing.

Disease symptoms are observed on one plant of one cultivar during the quarantine period and investigative diagnostic testing is conducted, including specialist sampling and microbial culturing. MALDI-ToF mass spectrometry testing is used on the initial culture plates to select colonies to take to pure culture. MALDI-ToF is used again to identify the species of bacterium, with nucleic acid extraction, PCR and DNA sequencing confirming the identification, which is a species already present in Australia.

When the plants display 'mature growth' the 30 plants undergo a specialist sample collection, and replicate plants are pooled before nucleic acid extraction and PCR testing for 5 target pathogens.

After approximately 14 months quarantine, the 30 plants undergo a specialist sample collection and intermediate examination for 'late-season' *Ceratocystis* testing and replicate plants are pooled before testing. Once all 15 cultivars complete their quarantine requirements, including final basic examination, they are released from PEQ.

A range of fees are applied for this scenario, at different times during the quarantine period.

Fees for stone fruit budwood in PEQ

Category	Activity	Price ($)
Specified activity	Sample handling (15 × cultivars, on arrival)	15 x 84 = 1260
	Specialist sample collection (15 × cultivars × 1 bud stick, on arrival, 15 in total)	15 × 9 = 135
	Microbial culturing – initial plating (15 × cultivars × 1 bud stick for Phytophthora, 15 in total)	15 x 30 = 450
	Nucleic acid extraction with purification – 11 or more samples (15 × cultivars × 1 bud stick)	15 x 49 = 735
	PCR – 11 or more samples ('housekeeping' gene × 15 extracts)	15 × 13 = 195
	PCR – 11 or more samples (15 × extracts × 2 tests, Phytophthora and Erwinia, 30 in total)	30 × 13 = 390
	Basic examination (15 × cultivars, × 2 grafted plants × 16 occasions, 480 examinations in total)	480 × 18 = 8640
	Specialist sample collection (15 × cultivars × 2 grafted plants, active-growth ELISA testing, 30 in total)	30 × 9 = 270
	Extraction for ELISA testing (15 × cultivars, pooled for 2 grafted plants, 15 in total)	15 × 10= 150
	ELISA – 11 or more samples (15 × extracts × 2 tests, 30 in total)	30 × 21 = 630
	Specialist sample collection (15 × cultivars × 2 grafted plants, active-growth high-throughput sequencing of small RNA, 30 in total)	30 × 9 = 270
	Nucleic acid extraction with purification – 11 or more samples (15 × cultivars, 2 grafted plants pooled, 15 in total)	15 × 49 = 735
	Nucleic acid quality check × 15	15 × 11 = 165
	High throughput sequencing of small ribonucleic acid (RNA) × 15	15 × 656 = 9840
	Specialist sample collection (1 × plant with symptoms)	9
	Microbial culturing (initial plating) (1 × bacterial (includes a duplicate plate))	1 x 30 = 30
	MALDI ToF (2 × bacterial colonies)	2 × 29 = 58
	Microbial culturing - isolation of bacteria or fungi in pure culture (1 × bacterium isolate (in duplicate))	1 x 32 = 32
	MALDI ToF (2 × bacterium isolates)	2 × 29 = 58
	Nucleic acid extraction with purification – 1 to 2 samples (2 × bacterium isolates)	2 × 107 = 214
	PCR – 1 to 2 samples (2 × bacterium isolates × 2 gene regions, 4 in total, separate run for each test applicable rate is for 1 to 2 samples)	4 × 86 = 344
	DNA Sequencing (2 × amplified DNA × 2 bacterial gene regions, 4 in total)	4 × 109 = 436
	Specialist sample collection (15 × cultivars × 2 grafted plants, late–season testing, 30 in total)	30 × 9 = 270
	Nucleic acid extraction with purification – 11 or more samples (15 × cultivars, 2 grafted plants pooled, 15 in total)	15 × 49 = 735
	PCR –11 or more samples ('housekeeping' gene × 15 extracts)	15 × 13 = 195

Category	Activity	Price ($)
	PCR –11 or more samples (15 × extracts × 5 tests, 75 tests in total)	75 × 13 = 975
	Specialist sample collection (15 × cultivars, × 2 grafted plants for Ceratocystis testing, 30 in total)	30 × 9 = 270
	Intermediate examination (15 × cultivars, pooled for the 2 grafted plants for Ceratocystis incubation, 15 in total)	15 × 130 = 1950
	Basic examination (15 × cultivars × 2 grafted plants – to clear for release, 30 in total)	30 × 18 = 540
Unspecified activity	Diagnostic in-office fee per quarter hour (on-arrival examination 1 hour)	4 x 42 = 168
	Diagnostic in-office fee per quarter hour (1 hour of bacterial sequencing analysis)	4 x 42 = 168
	Diagnostic in-office fee per quarter hour (6 hours for other activities related to finalising diagnostic work such as compiling reports)	24 × 42 = 1008
Total cost	–	**31,325**

Note: Courier fees, at cost, may also apply for samples requiring movement to a third-party laboratory for testing.

5 Cost comparison

Table 4 compares the total cost of diagnostic activities in relation to imported goods, under the current charging arrangements, to the total cost under the proposed new charging arrangements. These are the expected costs for diagnostic activities undertaken to assess and manage the biosecurity risk for each situation described in Scenarios 4 to 9.

Table 4 Comparison of cost under current and proposed charging arrangements – goods

Scenario	Estimated cost under current arrangement ($)	Cost under proposed structure 2026–27 prices ($)	Difference ($)	Rationale
4) Imported fresh fruit with disease symptoms	84	102	+18	Currently only 2 × in-office per 15-minute fees are applied per sample submission.
5) Imported rice with insect pests	84	120	+36	Currently only 2 × in-office per 15-minute fees are applied per sample submission.
6) Imported cut flowers, pests, disease and weed seeds	252	566	+314	Currently only 2 × in-office per 15-minute fees are applied per sample submission.
7) Imported fruit with multiple disease symptoms	84	3,593	+3509	Currently only 2 × in-office per 15-minute fees are applied per sample submission.
8) Potato tissue culture in post entry quarantine	5,775	5,220	−555	Current charges (time and consumable costs) have been reviewed and itemised to improve accuracy and transparency.
9) Stone fruit budwood in post entry quarantine	33,921	31,325	-2,596	Current charges (time and consumable costs) have been reviewed and itemised to improve accuracy and transparency.

6 More information

We will communicate further on the proposed fee structure and commencement of charging for all regulatory diagnostic activities through a variety of communication channels, including industry advice notices and the department's website.

For queries, email BioCRIS@aff.gov.au.