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行政院及所屬各機關出國報告提要

出國報告名稱：赴越南參加2012年檢疫管理會議報告書

頁數：含附件：是

出國計畫主辦機關/聯絡人/電話
農委會動植物防疫檢疫局/陸怡芬/02-33432052
出國人員姓名/服務機關/單位/職稱/電話
林秀儒/農委會動植物防疫檢疫局高雄分局/植物檢疫課/技正/07-9720537
陳孜彧/農委會動植物防疫檢疫局/植物檢疫組/技士/02-33432053

出國類別：□1考察□2進修□3研究□4實習■5 其他(參加會議)

出國期間：101年6月11日-101年6月15日　　出國地區：越南

報告日期：101年9月 12日

分類號/目：F7/農產品檢疫及家畜保健
關鍵詞：澳大利亞燻蒸認證計畫、國際貨運生物安全合作協議、檢疫處理、組織改造、風險管理

內容摘要：

檢疫管理會議(Quarantine Regulators Meeting, QRM) 係由澳大利亞農漁林部與地主國植物檢疫機關共同主辦之年度例行性國際會議，本(101)年度於6月12日至14日在越南胡志明市舉開，計邀請21國44位植物檢疫官員參加。本次議題有：一、因應現今困境之植物檢疫組織改造與政策方針；二、討論國際貨運生物安全合作協議(International Cargo Cooperative Biosecurity Arrangement, ICCBA)草案；三、澳大利亞燻蒸認證計畫(Australian Fumigation Accreditation Scheme)執行現狀之檢討與擴充；以及四、其他植物檢疫議題。與會國除對各項議題充分討論外，並對澳大利亞提案之ICCBA達成共識，將於會後進行審視並提供意見。

摘要

檢疫管理會議(Quarantine Regulators Meeting, QRM) 係由澳大利亞農漁林部與地主國植物檢疫機關共同主辦之年度例行性國際會議，本(101)年度於6月12日至14日在越南胡志明市舉開，計邀請21國44位植物檢疫官員參加。本次議題有：一、因應現今困境之植物檢疫組織改造與政策方針；二、討論國際貨運生物安全合作協議(International Cargo Cooperative Biosecurity Arrangement, ICCBA)草案；三、澳大利亞燻蒸認證計畫(Australian Fumigation Accreditation Scheme)執行現狀之檢討與擴充；以及四、其他植物檢疫議題。與會國除對各項議題充分討論外，並對澳大利亞提案之ICCBA達成共識，將於會後進行審視並提供意見。

目次

一、前言

2012年檢疫管理會議(Quarantine Regulators Meeting, QRM)係由地主國越南政府及澳大利亞政府主辦。目的爲加強檢疫處理與貨品國際貿易流通相關檢疫措施之國際合作。於會前一天並先行舉開貨運檢疫協議多邊工作小組(Multilateral Cargo Quarantine Arrangement Working Group, MCQAWG)會商，此工作小組係由智利、印尼、馬來西亞、紐西蘭、中國大陸及澳洲代表參與，負責擬定促進貨運檢疫風險管理之合作協議，並於QRM中提出。

本屆檢疫管理會議於6月12至14日在越南胡志明市Novotel Saigon Center召開，包含二日會議（12, 14日）及一日實地參訪行程（13日）。與會國家包括地主國越南、主辦國澳大利亞、汶萊、智利、斐濟、香港、印度、印尼、日本、馬來西亞、紐西蘭、薩爾瓦多（代表中美洲國際動植物防檢疫區域組織ORISA）、宏都拉斯（代表ORISA）、中國大陸、祕魯、菲律賓、韓國、新加坡、斯里蘭卡、泰國及我國等21國，計有44位植物檢疫官員參加。

澳大利亞爲確保輸入貨品檢疫處理效果，推動澳大利亞燻蒸認證計畫(Australian Fumigation Accreditation Scheme, AFAS)，目前參加國有印尼、馬來西亞、泰國、印度、巴布亞紐幾內亞、菲律賓及越南等7國，另中國大陸亦計畫加入，此一計畫係由各國統一設施及作業規範，並由澳大利亞提供技術訓練等服務，以期達到管理有害生物風險於輸出國之目的。檢疫管理會議即由AFAS研討檢疫處理規範及相關技術議題例會發展而來，並廣邀其他環太平洋區國家參與，本年度會議計畫以AFAS經驗爲基礎，建立國際貨運生物安全合作協議(International Cargo Cooperative Biosecurity Arrangement, ICCBA)，會中除提出草案外，並由澳大利亞爲主之數國發表現今國際貨運於執行檢疫遭逢之困難，作爲推動之背景。

二、行程

6月11日（一）自桃園國際機場搭乘長榮航空BR391班機前往胡志明市。
夜宿Novotel Hotel Saigon Center。

6月12日（二）檢疫管理會議。
夜宿Novotel Hotel Saigon Center。

6月13日（三）參訪Good Life Co., Ltd. 蒸熱處理場及古芝地道歷史遺跡。
夜宿Novotel Hotel Saigon Center。

6月14日（四）檢疫管理會議。
夜宿Novotel Hotel Saigon Center。

6月15日（五）搭乘長榮航空BR392班機自胡志明市返臺。

三、會議內容

（一）澳大利亞生物安全組織改造（澳大利亞報告）

澳大利亞係農業大國，農漁林部之職掌係確保澳國農業、漁業、食品業及林業之競爭力、收益與永續性。生物安全爲農漁林部之主要責任之一。農漁林部爲降低外來疫病蟲害入侵並立足於澳大利亞，進而危害自然環境、糧食安全與造成經濟損失，積極與地方政府、機關、產業界與社區共同合作，綜理生物安全相關施政。生物安全係大於檢疫之概念，惟檢疫確爲其中重要一環。

生物安全之核心任務爲：集中資源管理重大風險、與相關單位緊密合作、協助拓展農產品海外市場及防範外來有害生物入侵，以及維護農產輸出之競爭力。改組後之農漁林部生物安全局，藉由風險評估、輸出入檢疫、認證作業、監測與偵察以及防治與撲滅措施，以期達成前述目標。

現今生物安全部門，面臨諸多挑戰，如國際貿易的增長、貿易品項的改變、氣候變遷、人口擴散以及新崛起之疫病蟲害等等，因而需要相應之措施與管理思維。澳大利亞以世界領先之生物安全體系爲目標，採行五大原則：

1.以風險爲基礎：將資源集中於高風險處，針對低風險貨品及通路僅維持最低限必要管制，以使輸出入檢疫通關便捷。

2.生物安全之連續性：將風險管理措施擴及境外、口岸及境內。

3.強化與相關各界合作：強化與民眾、業者、中央及地方政府機關、國際組織與貿易夥伴之合作。

4.情報導向與以證據爲基礎之決策制定。

5.現代化之法制作業、科技、永續經營與新組織架構與作業流程。

（二）馬來西亞燻蒸處理設施審查系統（馬來西亞報告）

馬來西亞目前共有76家認可處理業者。依規定，業者須向農部申請設施認證，並須具備相關登記執照、符合規定之燻蒸設備以及操作能力，通過認證業者發給一核准編號，效期兩年。

馬來西亞加入AFAS後，爲管理國內檢疫燻蒸處理設施業者，除建立與AFAS相同之處理基準外，並發展一套審查系統，以確保設施符合AFAS規範。進行審查時，審查小組將就設施業者實際燻蒸處理操作以及人員訓練記錄、作業流程與處理紀錄等文件進行審查。

實地審查係由馬國政府訓練完成之審查員進行，審查員須先具燻蒸操作訓練資格，經過針對審查項目之專門訓練、由資深審查員帶領實習並經考核後完成始取得資格。審查員任期兩年，須宣誓符合倫理規範並避免利益衝突。爲掌握認證業者執行處理情形並確保經處理物品之可追溯性，馬國亦採行處理物編

製流水號及不定期檢查方式，以有效監控業者。

（三）紐西蘭生物安全系統之運作、危機與挑戰（紐西蘭報告）

紐西蘭初級產業部(Ministry of Primary Industries, MPI)，係經組織改造整併而成，生物安全相關業務歸於此機關綜理。MPI之核心策略爲運用建構能力與合作夥伴關係，達到拓展出口市場、增加生產、提升永續資源利用以及防杜生物風險。

實際於邊境檢疫，則爲達有效運用資源達到所需之保護，除規劃先進之資訊系統以便捷通關程序外，並導入首次到達點(Point of First Arrival, PoFA)概念，重點管理生物安全風險，除減省業務複雜度之外，對於風險評估與相關儲運及檢疫處理設施管理亦能節約花費。

（四）ICCBA多邊協議工作小組進程報告（澳大利亞報告）

多邊協議工作小組經多次遠距與實體討論後，提出0.6版ICCBA草案(如附件一)，經說明後與會各國基本上仍對此一協議基本架構表示同意，並當場提出相關意見。會議決定後續將再徵詢各與會單位對現行草案版本之意見並續行修正。

（五）熱處理原則草案（澳大利亞報告）

澳大利亞提出1.8版熱處理原則草案（如附件二），此一版本包括乾熱與濕熱處理，因會中對於此項議題討論熱烈，澳方建議針對熱處理原則草案組成工作小組共同負責後續進展，並由各國自願加入。

（六）參訪行程：Good Life Co., Ltd.鮮果輸出蒸熱處理設施與古芝地道文化參訪

Good Life Co., Ltd.係由日商於2009年在越南設立之企業，專營鮮果（主要爲紅龍果)之檢疫處理與輸出，目前已有一處蒸熱處理場，並每年邀請日本檢疫官駐場辦理會同檢疫。本次所參訪之處理設施位於胡志明市古芝區知農業科技園區，係該公司因應業務量擴大增設之新場區，佔地兩公頃，其中設施佔8,800平方米，採用與我國大多數鮮果蒸熱處理場相同，由日本三州產業製造之三噸級蒸熱處理設備，估計開始營運後年處理量可達2,000噸，並計畫陸續增設蒸熱機組擴大產能。目前尚未開始營運，但所有設備皆已設置完成。紅龍果之生產基地則位於越南南部之隆安省及平順省，皆符合Global GAP規範

古芝地道（Cu Chi Tunnels）位於胡志明市近郊，係越戰時越共對抗美軍之著名史跡。

（七）生物安全之連續性－產業界措施與績效導向（澳大利亞報告）

生物安全之風險如超越可接受水準，則須採取管理措施；若風險無法控制於可接受水準內，則須禁止貿易。澳大利亞生物安全之連續性概念即以此爲基

礎，將傳統著重於邊境檢查之檢疫擴展至境外(Pre-Border)、邊境(Border)及境內(Post-Border)，透過情報分析以達風險管理目的。

生物安全於境外，須透過政府與外國政府或企業之合作、國際會議以及多邊協議推展；於邊境則須有效鑑定風險，並強化遭檢舉以及具高風險質疑之貨品檢查，同時與產業界合作，設立符合檢疫規範之相關設施；於境內則以監測措施確保生物安全，並與地方政府、民眾及產業界緊密聯繫，透過媒體公關加強全民生物安全意識。如此連貫而整體化的政策，將有助於以有限資源達到保障生物安全之目的。

（八）多港埠輸入型態之生物安全管理（菲律賓報告）

菲律賓具有特殊地理環境，國土為7,107座大小島嶼構成，植物檢疫機關植物產業局(Bureau of Plant Industry, BPI)轄下30個檢疫站共須管理91處主要港口、94處次要港口以及41處機場之檢疫業務。

為有效管理輸入植物生物安全，菲律賓採取有害生物風險評估措施以事前決定輸入貨品之風險層級，於邊境實施檢疫時配合海關將所有貨品分為4線，超綠線及綠線，免驗直接徵稅放行；黃線則以書面審核為主，若屬植物產品則配合臨場查驗；紅線則屬高風險貨品，全數須接受海關查驗，如屬植物產品亦須經植物檢疫。多港埠型輸入對於植物檢疫人員而言，具有較大人力與資源負擔以及與各港埠相關單位聯繫作業需求，但相對而言亦有各檢疫站對轄區內業務較容易掌握及檢疫人員對於特殊貨品檢疫較為專精等優勢。

（九）貨櫃燻蒸氣體保留量試驗報告（澳大利亞報告）

依據溴化甲烷燻蒸作業標準，實施燻蒸之燻蒸櫃自200Pa下降至100Pa須耗時10秒以上，方能確保燻蒸氣體能夠保留於燻蒸櫃中不致逸散。貨櫃內燻蒸氣體之洩漏主要係經由貨櫃地板，澳大利亞、紐西蘭及新加坡分別以三種不同填封方式進行測試，結果顯示以條狀沙袋配合膠布以及底部密封方式能有效防止燻蒸氣體洩漏。

（十）秘魯果實蠅撲滅計劃之原則與設計（秘魯報告）

秘魯係地中海果實蠅(*Ceratitis capitata*)、西印度果實蠅(*Anastrepha obliqua*)、南美果實蠅(*A. fraterculus*)、黑果實蠅(*A. serpentina*)、中美果實蠅(*A. striata*)及印加果實蠅(*A. distincta*)疫區，秘魯位於南美洲西部太平洋岸，其鄰近之亞馬遜河盆地自然發生之果實蠅不斷移入，致使其撲滅計畫困難，惟秘魯境內具有高山、沙漠等地理屏障，實際上該國南部絕大多數為地中海果實蠅，而果實蠅種類構成越往北部地區多樣性越大。

為保護其鮮果生產及拓展外銷，秘魯進行果實蠅撲滅計畫，其主要內涵如下：

1．建立整合之監測、防治與資訊傳遞系統。

2．依據果實蠅監測密度劃定監控區、族群抑制區、撲滅行動區、撲滅後維持區以及預防入侵非疫區等，分別實施不同之防疫或監測措施。

3．對於果農以法令強制其配合撲滅計畫及實施教育訓練，

4．進行國內檢疫(Domestic quarantine)，管制鮮果流通，於兼具地理屏障之關口設置檢查站，配合檢疫犬隊偵測，並以燻蒸、低溫冷藏及熱水等檢疫處理方式確保國內流通之鮮果無傳播果實蠅之虞。

秘魯設定15年，三階段之撲滅計畫，於其南部Moquegua大區及Tacna大區投入逾2,500萬美元以收初步成效，並計畫漸次推展至其主要輸出港口以及中部行政區。

四、會議決議

（一）與會各國感謝越南與澳大利亞共同主辦此次會議。

（二）與會者同意審閱會中提出之ICCBA多邊協議草案，並將意見於八週內送交澳大利亞農漁林部生物安全局。

（三）於收集所有意見後，多邊協議工作小組將再度召開以依據提出之意見修正協議草案。

（四）與會者針對修正版之熱處理原則草案進行討論，並決議後續將由馬來西亞、印尼、印度、斐濟、紐西蘭、菲律賓、智利及澳大利亞組成之工作小組進一步研析條文。

（五）與會者將有六週時間提出對於目前版本之熱處理原則草案之意見，並送交澳大利亞農漁林部生物安全局。

（六）於收集所有意見後，澳大利亞農漁林部生物安全局將召開熱處理原則工作小組會議以討論提出之意見。

（七）澳大利亞農漁林部生物安全局將於八週內將與紐西蘭及新加坡共同進行之溴化甲烷氣體保留量試驗結果（圖表與試驗設計）提供所有與會者。

（八）澳大利亞農漁林部生物安全局將提供所有與會者其對認證檢疫設施管理相關資訊。

（九）與會者表示希望於未來會議中探討下列議題：

1.各檢疫機關組織改造之過程與最新進展。

2.澳大利亞農漁林部生物安全局如何與產業界發展合作協議

3.研析管理已經檢疫處理貨品之處理後衛生基準。

4.各檢疫機關對於境外、邊境與境內之風險辨識與對應措施實務。

5.處理證明之標準化與查證，以確保標準一致並防杜偽造證明。

（十）與會者皆全力支持本檢疫管理會議之續辦，澳大利亞農漁林部生物安全局邀請有意願之與會國共同主辦2013年檢疫管理會議。

五、心得與建議

伴隨商品貿易量與貿易種類而帶來的生物安全風險，已不限定於貨品本身，衝擊了傳統「檢疫」概念。面臨國際貿易自由化、區域整合以及氣候變遷，植物檢疫機關面臨前所未有之嚴峻挑戰；另一方面，各國政府精簡組織改造已成趨勢，檢疫機關於改造過程中多為裁減合併之對象，如何於資源限縮環境下完成日益增加的業務，同時維持與以往相同甚或更高之生物安全保護水準，實係各國檢疫機關共同面臨之課題。所幸資訊科技發展有助於生物安全業務推展並增強邊境檢查第一線與檢疫機關之聯繫，如何設計合理流程並有效管理將是成功關鍵。紐、澳二國向來對檢疫及生物安全十分重視，亦皆已完成檢疫機關組織改造，其架構與核心概念值得我國借鏡。

紐澳對於生物安全提出的觀念中，特別值得注意的是其認為僅靠檢疫機關執行邊境檢查，勢必無法達到有效的防護，因此須將觸角向內外伸展，對內加強與業者合作，對外則以達阻絕風險於境外的目的。傳統上境外的檢疫係查證輸出國生產管理、防疫措施以及輸出程序等；境外的生物安全則透過提供技術支援與共同協議檢疫措施基準，以合作為基礎共同提升國際間生物安全水準。

澳大利亞為積極拓展其生物安全理念至主要輸出國，並建立符合其檢疫要求之檢疫措施基準，以舉辦會議並擬定共同協議方式喚起貿易夥伴國合作；雖無法超出國際規範，但可透過提供技術支援等協助，促使輸出國主動遵從共通檢疫處理規範，達到高於國際規範保護水準之目的。目前相關協議於現行AFAS簽署國間推動尚稱順利，而中、日、韓等國亦採密切關注態度；我國雖於國際規範基礎下，輸出入不受該等協議影響，惟亦應重視其發展，並積極研析相關措施，以作為未來檢疫措施委外辦理之參考。

目前我國檢疫處理，僅輸出及少部分輸入木質包裝材料之檢疫處理以委託民間業者方式辦理，係為因應國際植物防檢疫措施標準第十五號 (ISPM 15)規範。針對受託辦理木質包裝材料檢疫燻蒸及熱處理業者，係以「木質包裝材委託檢疫燻蒸及熱處理管理要點」進行管理，該要點內容除ISPM 15所規定必備條件外，皆係依辦理木材及木質包裝材檢疫處理自行制訂，管理方式亦以主管機關動植物防疫檢疫局為主體，然該業務開辦至今受託業者數量相對龐大，且針對處理設施與作業仍偶有疑義，前述跨國間處理規範恰可填補國際規範與國內管理法規間之不足，尤其關於技術性細節以及設施認可與管理審查機制，可確保各國處理標準一致並減少各自建立管理機制之行政資源浪費。

本會議與會國達廿國以上，其中不乏與我國農產貿易密切者，參加人員均為承辦檢疫業務之公務員，惟職位各異，實為與各國檢疫人員進行交流並了解相關檢疫事務之難得機會。本會議每年度召開，由澳大利亞支付與會人員旅費。因討

論議題多涉檢疫處理規範，建請爾後召開時推派熟悉檢疫處理業務、植物檢疫施政或國際合作人員與會。

附件一

International Cargo Cooperative Biosecurity Arrangement (ICCBA): Working Group draft 11 June 2012

June 2012

DRAFT 11 June 2012 17:45pm v.6

DOCUMENT VERSION CONTROL REVISION ICCBA ARRANGEMENT				
Version	**Date revised**	**Section Revised**	**Revision**	**Date of next review**
v0.1	April 2011	First Draft		May 2011
AGS v.1				
AGS v.2	22 May 2011	Entire document	Reviewed and amended by Australian Government Solicitors (AGS)	
IAP v.3	6 February 2012	Entire document	Reviewed by the International Arrangements Program and the Multilateral Arrangement Working Group (feedback from China)	Scheduled for April 2012 – in time for 2012 Quarantine Regulators' Meeting
IAP v.4	9 March 2012	Entire document	Incorporated changes as per decisions from the first Multilateral Arrangement Working Group teleconference (22 February 2012)	Scheduled for 28 March 2012 – second Working Group teleconference
IAP v.5	27 April 2012	Entire document	Incorporated changes as per decisions from the second Multilateral Arrangement Working Group teleconference (28 March 2012)	To be held on 11 June (face-to-face)
MAWG v.6	11 June 2012	Entire document	Incorporated changes following feedback within the working group and during face-to-face discussions (11 June 2012) Name change to ICCBA	Collation of feedback post Quarantine Regulators Meeting (due back 12 August 2012)

THE MEMBER AGENCIES,

RECOGNISING that, as agencies specialising in biosecurity services, their objective is to reduce the quarantine risks associated with the movement of cargo (including commodity and non-commodity items) between their respective countries;

RECOGNISING the mutual benefits gained through cooperative biosecurity initiatives;

CONSISTENTLY with the prevailing laws and regulations of the Member Agency countries;

HAVE REACHED THE FOLLOWING ARRANGEMENT:

1. PURPOSE

1.1 The purpose of this Arrangement is to:

a. facilitate and promote cooperation between the Member Agencies, with a view to developing, implementing and maintaining consistent biosecurity measures and assurance processes for cargo in trade between the Member Countries;
b. help build the capacity of Member Agencies to deliver biosecurity measures and assurance processes;
c. standardise the training and delivery of biosecurity measures and assurance processes to improve the integrity of activities included in the Schedules; and
d. establish a basis for the mutual recognition of biosecurity measures and assurance process results between Member Agencies.

1.2 This Arrangement records the understandings of the Member Agencies, but does not create legal obligations.

1.3 This Arrangement is intended to complement the activities of the Commission on Phytosanitary Measures (CPM) and the World Organization for Animal Health (OIE) and the obligations of Member Countries as members of these organisations.

1.4 Each Participating Agency retains the right to apply further processes to cargo and to refuse entry to cargo, even though the goods have been dealt with under the terms of this Arrangement.

2. DEFINITIONS

2.1 ***Agency*** means a governmental institution specialising in biosecurity services.

2.2 ***ICCBA*** means the International Cargo Cooperative Biosecurity Arrangement.

2.3 ***Joint System Review (JSR)*** means a Joint Review by Participating Agencies of another Participating Agency's performance and management of a specific Schedule

under the Arrangement. The JSR may also assess the compliance of registered providers within the country being reviewed.

2.4 ***Member Agencies*** means the Agencies which are signatories to this Arrangement.

2.5 ***Participating Agencies*** means the Agencies which are signatories to a Schedule/s under this Arrangement.

2.6 ***Member Countries*** means the countries to which the Member Agencies belong.

2.7 ***Provider*** means a commercial entity (person or company), who provides a biosecurity measure or an assurance process to which this Arrangement applies.

2.8 ***Schedule*** means a Schedule to this Arrangement, adopted under paragraph 6, which sets out the procedures and processes relating to a specific cooperative biosecurity measure and/or assurance process.

2.9 ***Cargo*** means goods, including commodity and non-commodity.

2.10 ***Biosecurity Measures*** means actions undertaken to prevent the movement of pests and diseases to other countries; and includes quarantine measures.

2.11 ***Assurance Process*** includes any action intended to verify the effectiveness of a biosecurity measure.

3. STEERING COMMITTEE

3.1 There will be an ICCBA Steering Committee consisting of one representative of each Member Agency.

3.2 Annual meetings of the Steering Committee will be held in a Member Country on a rotational basis, unless otherwise decided by the Steering Committee.

3.3 Additional meetings of the Steering Committee may be held as decided by the Steering Committee. Such additional meetings may be held by telephone or computer link or other electronic means, or face-to-face.

3.4 The Steering Committee will have responsibility for the overall direction and decision making capacity of the ICCBA and will discuss and make decisions on any issues concerning the operation of the ICCBA referred to it by a Working Group.

3.5 A Chairperson will be appointed by the Steering Committee on a rotational basis for each meeting, and should ordinarily be from the host country.

4. ICCBA WORKING GROUPS

4.1 To ensure the effective ongoing management of the Schedules under this Arrangement, there will be an ICCBA Standing Working Group created for each individual Schedule.

4.2 Each Agency participating in a particular Schedule (a Participating Agency) may nominate a representative to participate in the Standing Working Group, if it so wishes. Only Participating Agencies in that particular Schedule can have representation in the Standing Working Group for that Schedule.

4.3 The Standing Working Group will meet as required, by telephone, computer link or other electronic means, or face-to-face.

4.4 The main functions of the Standing Working Group will be to:

(a) Provide advice and reports to the Steering Committee on matters concerning the operation of the Arrangement, pertaining to the specific Schedule(s) that the Standing Working Group is involved with;

(b) Liaise with the Secretariat and other working groups as necessary, to ensure the ongoing effectiveness of the Arrangement and any attached Schedules;

(c) Consider specific issues at the request of the Steering Committee.

4.5 A Standing Working Group or the Steering Committee may establish *ad hoc* Technical Working Groups to develop or address any specific treatment or operational requirements of an existing Schedule as raised by an Agency (regardless of their participation in the Arrangement or not). These *ad hoc* Technical Working Groups will be comprised of representatives from the Member Countries, chosen according to their technical knowledge and experience. Subject-matter experts, who are not part of the Arrangement, may also be engaged, if their expertise will add value to the Technical Working Group. The outcomes of this process will be forwarded to the Standing Working Group for this subject (where one exists), for a decision, or passage to the Steering Committee (where required).

4.6 A Technical Working Group can also be formed to review the viability of a new treatment methodology if proposed by either a Member Agency or an Agency that is not party to the Arrangement; the proposal will be coordinated by the Secretariat. The outcomes of the review will be forwarded to the Secretariat, who will advise the Steering Committee accordingly. The Steering Committee will have the final decision on the inclusion of the methodology and, if accepted, will be responsible for forming a Standing Working Group to develop a Schedule for that methodology.

5. SECRETARIAT

5.1 The Secretariat will be provided by the Department of Agriculture, Fisheries and Forestry Biosecurity (DAFF Biosecurity), for an initial period of four (4) years with the possibility of extension if so decided by the Steering Committee and accepted by DAFF Biosecurity.

5.2 Following the initial period and any extension, the Secretariat will be provided by another Member Agency (or Agencies) that has/have accepted that role at the request of the Steering Committee.

5.3 The Secretariat will be responsible for:

(a) organising all ICCBA meetings (i.e., meetings of the Steering Committee, the Standing Working Groups and the Technical Working Groups), inclusive of the guest speakers, arranging external funding where applicable, and general coordination of meeting resources and attendance;

(b) providing the *rapporteur* function for all ICCBA meetings when required;

(c) coordinating media relations or events that require a central point of contact or management, while recognising that normally each Member Agency will be responsible for handling its own media relations;

(d) maintenance of the register of providers**;**

(e) coordination of training and JSRs and related administration if required;

(f) assisting, where necessary, in applications for funding from external sources; and

(g) general administrative duties as required.

6. AGENCY PARTICIPATION IN AND TERMINATION OF SCHEDULES UNDER THIS ARRANGEMENT

6.1 Only those who are Member Agencies can seek to participate in Schedule/s under this Arrangement.

6.2 Each biosecurity measure accepted as part of ICCBA will be included as a separate Schedule will set out the specific requirements for that biosecurity measure. A Schedule to this Arrangement forms part of the Arrangement.

6.3 A Member Agency may choose to implement any Schedule under this Arrangement, by notifying the Secretariat of its intention to do so.

6.4 Prior to accepting the application, the Secretariat will forward the proposal to all Standing Working Group members involved in that particular Schedule. The Standing Working Group members will conduct a preliminary assessment of the Applicant Agency's resources and capacity to carry out its undertakings under the Arrangement with respect to the Schedule(s) that it wishes to adopt. This assessment will be conducted by the Standing Working Group and may involve a physical assessment of relevant facilities.

6.5 If, through the preliminary assessment, the Standing Working Group finds the Applicant Agency's resources or capacity to effectively fulfil their obligations under the Schedule to be insufficient, the Standing Working Group may then work with the Applicant Agency to address the recommendations it has made, building the capacity and capability of the applicant agency and its country in order for it to effectively participate in the Schedule. The Standing Working Group will notify the Secretariat of the results of the assessment, identifying and clearly articulating areas where improvement is required (and possible remedies to ensure compliance). The Secretariat will then notify the Applicant Agency, in writing, of this outcome and recommendations (if necessary).

6.6 If the Applicant Agency is not satisfied with the decision of the Standing Working Group, it may, if it so wishes, appeal its case to the Secretariat, in writing, clearly articulating the reasons for the appeal.

6.7 The Secretariat must notify the relevant Standing Working Group of this appeal. The Standing Working Group may then work with the Applicant Agency to address the recommendations it has made, building the capacity and capability of the applicant agency and its country in order for it to effectively participate in the Schedule.

6.8 Pending the outcome/s of actions undertaken in Items 6.4 to 6.7, the Standing Working Group, in collaboration with the Applicant Agency, will determine the Applicant Agency's ability to participate in the Schedule. Alternatively, the Standing Working Group may undertake actions as per Item 4.5 of the Arrangement.

6.9 Once adopted, the terms of a Schedule will apply to, and between all Participating Agencies that have accepted the Schedule.

6.10 Any Agency may choose to exit a Schedule, with the provision of 60 days written notice to the Secretariat. Upon withdrawal, the providers of that Participating Agency's country will be removed from the register of providers.

7. INCLUSION OF NEW SCHEDULES UNDER THIS ARRANGEMENT

7.1 Any Agency (regardless of their participation in the Arrangement or not) may propose the addition of a new Schedule, by notifying the Secretariat or the Steering Committee. The Secretariat will action this as per Item 4.6 of the Arrangement.

7.2 As per the outcome of Item 4.6, the Standing Working Group formed for a new Schedule will be responsible for determining the administrative requirements of that particular Schedule, in consultation with the relevant Steering Committee members. Once these requirements have been determined and agreed upon by all members of the Standing Working Group, then Agency participation in a Schedule will undergo the same assessment process outlined in Items 6.3 to 6.8.

8. AMENDMENTS TO EXISTING SCHEDULES UNDER THIS ARRANGEMENT

8.1 Any Agency (regardless of their participation in the Arrangement or not) may propose the amendment of an existing Schedule under the Arrangement by notifying the Secretariat or the Steering Committee. The Secretariat will inform the relevant Standing Working Group of this proposal. The Standing Working Group will action the proposal as per Item 4.5 of the Arrangement.

9. REGISTER OF PROVIDERS

9.1 Each Participating Agency will, for each Schedule that it has adopted, provide to the Secretariat a list of providers in its country that the Participating Agency considers comply with the standards set out in the Schedule.

9.2 Any alteration to the list should comply with the requirements set out in the relevant Schedule.

9.3 The Secretariat will maintain a register of providers for each Schedule, consisting of the providers included on lists provided to it by the Participating Agencies.

9.4 The register of providers will be made available to all Participating Agencies that have adopted the relevant Schedule.

10. PARTICIPATING AGENCIES TO HAVE REGARD TO REGISTER

10.1 Each Participating Agency will have regard to the register of providers in administering the biosecurity requirements of its country, subject to the laws, regulations and policies of that country.

11. AUDITING OF REGISTERED PROVIDERS

11.1 Each Participating Agency will conduct audits of registered providers in its country in accordance with the relevant Schedule.

11.2 The frequency of audits may be increased for a provider where previous audit results indicate that it may present a higher risk of non-compliance.

12. RECORD KEEPING

12.1 Each Participating Agency is responsible for obtaining and maintaining its own records, pertaining to the specific requirements of each Schedule.

12.2 A Participating Agency will keep its records for a minimum of two (2) years, unless specified otherwise in the relevant Schedule and in observance of each country's document maintenance requirements. Records to be maintained for the purposes of the Schedule/s, will include:

(a) Training and assessment of accredited persons;

(b) Registration and auditing of treatment or inspection providers; and

(c) Any other records as required.

13. JOINT SYSTEM REVIEWS

13.1 JSRs of each Participating Agency in a Schedule, will be conducted in the Agency's country, to assess the Agency's overall management of its role under the Arrangement including each Schedule that it is participating in.

13.2 JSR timetables for the year and general administrative requirements will be arranged between the relevant Participating Agencies and will be coordinated by the Secretariat.

13.3 Members of each JSR team will be chosen by mutual understanding of the Participating Agency to be reviewed and the Steering Committee. Subject to such agreement, non-participating Agencies, may attend a JSR as an observer.

13.4 All results and documents arising from a JSR will be maintained by the Agencies involved in the JSR and may be forwarded to the Secretariat upon request.

13.5 Only JSR outcomes that will affect the register of providers must be provided to the Secretariat, which will update the register accordingly.

14. CONSULTATION AND DISPUTE SETTLEMENT

14.1 If any Member Agency considers that any objectives of this Arrangement or a specific Schedule are being impeded as the result of the failure of another Agency or Agencies to carry out its role under this Arrangement, it may make written

representations to the relevant Standing Working Group, which will address them as a matter of urgency.

14.2 The Standing Working Group will assess all physical and documentary evidence as necessary and as available, within a 60 day timeframe, and make a recommendation to be discussed at a Steering Committee Meeting.

14.3 The Steering Committee will then have 30 days to deliberate on a decision and present it to the Agencies concerned.

14.4 All Agencies concerned may appeal the decision of the Steering Committee, in writing, within 30 days of the decision being made. Appeals must be made directly to the Steering Committee, which will then have a further 30 days to deliberate. The decision pending the appeal process is then the final decision of the Steering Committee, and may not be reappealed.

15. NON-PERFORMANCE BY PARTICIPATING AGENCY

15.1 If, following a JSR or as a consequence of representations by a Participating Agency under paragraph 14, the Steering Committee is of the view that a Participating Agency is not ensuring that its providers meet the requisite requirements of the Schedule, it will make a decision to that effect.

15.2 If the Steering Committee makes a decision under the preceding paragraph, the Secretariat will suspend from the register all the providers from the country of the Participating Agency concerned, with regard to that specific Schedule.

15.3 If the providers of a country of a Participating Agency have been suspended following a decision of the Steering Committee under subparagraph 15.2, the suspension will be lifted if a subsequent JSR of the Participating Agency concerned gives a satisfactory result.

16. KEY CONTACT PERSON/S AND CHANGES IN LEGISLATION

16.1 Each Member Agency will appoint a Contact Person responsible for managing the liaison between it and all other Member Agencies, and will be the first point of contact on matters relating to this Arrangement.

16.2 Any changes in the details of the Contact Person shall be communicated to the Secretariat and Member Agencies as soon as possible.

16.3 Each Agency shall inform the Secretariat and other Member Agencies of any changes in its laws and regulations relevant to this Arrangement and/or Schedules under this Arrangement.

17. COSTS AND RESOURCES

17.1 Each Member Agency is responsible for any costs it incurs in carrying out its responsibilities under this Arrangement, subject to any arrangements that may be reached between Member Agencies or countries to provide assistance.

17.2 The Member Agencies will make available resources and officials for any tasks undertaken under the Arrangement, including the Schedule(s) in which they are participating, as far as their technical and economic capacity allows.

17.3 The costs of the Secretariat relating to its core responsibilities set out in paragraph 5 will be funded by the Member Agencies that provide the Secretariat. The Secretariat may accept requests made by the Steering Committee or a Working Group to undertake activities in addition to its core responsibilities, on the basis of a satisfactory arrangement being reached on the funding of those activities.

17.4 The Agencies will individually or jointly investigate funding sources and develop proposals to finance cooperative biosecurity initiatives where applicable and this may be coordinated by the Secretariat.

18. INTELLECTUAL PROPERTY

18.1 Intellectual property provided or created for the purposes of this Arrangement, or derived from such material, will remain or vest in the Agency/ies that provided or were involved in creating the material, consistent with international law and practices.

19. AMENDMENTS TO THE ARRANGEMENT

19.1 Any Member Agency may propose an amendment to this Arrangement, other than the Schedule(s).

19.2 Proposed amendments to the Arrangement should be sent to the Secretariat which will forward them to the Standing Working Groups and to all Member Agencies within 30 days.

19.3 The Standing Working Groups will review all proposals for amendments and any possible effects on the Schedules under the Arrangement, and make recommendations for consideration at a Steering Committee Meeting.

19.4 Amendments to the Arrangement, other than the Schedules, may be adopted only by a consensus vote of the Steering Committee. Each amendment so adopted will come into effect on the date it is adopted, or on such other date as is determined by the Steering Committee.

19.5 For the purpose of Item 19.4, consensus means, the agreement of the full membership, or the full membership minus one (1).

20. ENTRY INTO EFFECT, DURATION AND TERMINATION OF THE ARRANGEMENT

20.1 This Arrangement will come into effect from the date of signature of at least three (3) Agencies.

20.2 After the Arrangement has come into effect, an Agency may become a Member Agency by notifying the Secretariat of its intention to do so. Participation in the Arrangement is only formalised when the Agency signs the Arrangement.

20.3 A Member Agency may withdraw from this Arrangement by giving 60 days written notice to the Secretariat.

20.4 This Arrangement will be subject to review, three (3) years from the date it comes into effect.

21. TABLE OF SCHEDULES

21.1 This table lists those cooperative biosecurity initiatives agreed to by the Agencies:

i. **Schedule A:** Methyl Bromide Fumigation Methodology
ii. **Schedule B:**
iii. **Schedule C:**

Country	Schedule(s)	Signatory to Schedule	Commencement Date

DRAFT 11 June 2012 17:45pm v.6

IN WITNESS WHEREOF, the undersigned, have signed this ARRANGEMENT:

SIGNED for and on behalf of **XXXXXXXXXXX**	**SIGNED** for and on behalf of the **DEPARTMENT OF AGRICULTURE, FISHERIES AND FORESTRY BIOSECURITY**
..... Signature of authorised representative	..... Signature of authorised representative
..... Name of authorised representative (print)	..... Name of authorised representative (print)
Date:……..	Date:……..

SIGNED for and on behalf of **XXXXXXXXXXX**	**SIGNED** for and on behalf of **XXXXXXXXXXXXX**
..... Signature of authorised representative	..... Signature of authorised representative
..... Name of authorised representative (print)	..... Name of authorised representative (print)
Date:……..	Date:……..

DRAFT 11 June 2012 17:45pm v.6

BIOSECURITY HEAT TREATMENT METHODOLOGY

Version 1.9

Prepared by

Australian Government
Department of Agriculture, Fisheries and Forestry

Version	Description and reason	Author	Date
1.7	Review of heat treatment standard	D Kershaw	20 March 2012
1.8	Review with Country comments	D Kershaw	25 May 2012
1.9	Proposed version with comments included	D Kershaw	5 July 2012

Please use this version when providing comments.

NB: This version was compiled by Australia after the QRM in order to create a more understandable document.
It incorporates received comments, highlighted in yellow.

To be read in conjunction with version 1.8 with track changes.

CONTENTS

GLOSSARY OF TERMS

Term	Definition (for the purpose of this methodology)
Consignment	Is the target commodity and may also include the packaging material and/or the container used in transport.
Target temperature	The temperature measured at the centre of the target consignment.
Dry heat	Forced hot air into the enclosure to heat the commodity.
Enclosure	A physical container; permanent, temporary or mobile, that is used for performing heat treatments.
Heat Treatment Certificate	Documentation certifying that a heat treatment has been conducted in compliance with import requirements.
Heat treatment rate	The minimum temperature and (humidity where applicable) that must be maintained for a specified period.
Hot water treatment	Uses heated water to raise the temperature of the commodity to the required temperature for a specified period of time.
Humidity	The amount of water vapour in the air expressed as a percentage.
Kiln drying	A process in which wood is dried in an enclosure using heat and/or humidity control to achieve a required moisture content.
Microwave	A treatment where electromagnetic waves are produced and absorbed by water molecules in the wood, producing heat.
Inorganic	Man made products such as steel and plastic.
Organic	Natural products or those made from natural products such as wood and grain.
Probe	A temperature sensor to measure the core temperature.
Treatment exposure period	The required period for which the minimum temperature must be maintained.
Vapour heat	Forced hot air with high relative humidity to heat the commodity.

PURPOSE

- The methodology establishes a basis for the mutual recognition of heat treatments for quarantine purposes.
- This methodology sets out the requirements for design, operation, calibration, post treatment handling, auditing and record keeping of heat treatment facilities, permanent or temporary, for the application of heat treatments for quarantine purposes.
- The methodology applies to heat treatments that may employ hot air dry heat, steam vapour heat, hot water, kilns, exposure to microwave energy or any other method used to raise temperature in the target consignment.

SCOPE

- The application of heat as a quarantine treatment to any consignment and packaging suited to such treatments.

HOW TO USE THIS METHODOLOGY

MANDATORY	INFORMATIVE
This column lists conditions that **MUST** be achieved and actions that **MUST** be undertaken in order to conform to the requirements of this methodology.	This column provides information that may be helpful to treatment providers in achieving the mandatory requirements.

MANDATORY	INFORMATIVE
GENERAL REQUIREMENTS	
1.1 Enclosures used to conduct heat treatments for quarantine purposes must be designed and operated to ensure the specified core temperature and (if required humidity) is achieved and maintained for the duration of the treatment exposure period.	**1.1 a. Enclosures may be of fixed or temporary construction.** **b. An enclosure should contain the heat and (if required humidity) to ensure that in the case of organic materials the centre of the target consignment will be treated effectively; and in the case of inorganic materials, the surface with the target organism reaches the required temperature.**
HEAT SOURCE	
2.1 Any heat source may be used that is capable of reaching and maintaining the required temperature; • **throughout the consignment or** • **over the entire surface of inorganic materials, for the duration of the specified treatment exposure period.**	**2.1 a. Hot air, steam, hot water, and exposure to microwave energy are examples of heat sources that may meet the requirements of this part.** **b. Some heat sources are not suitable for heating some commodities, e.g. diesel heating for food commodities as diesel leaves a residue on surfaces.**
TREATMENT MEASURING EQUIPMENT	
3.1 Every enclosure must have means of measuring temperature in the consignment, appropriate to the type of treatment, heat source and the size of the enclosure.	**3.1 a. For small enclosures (under two square metres) one probe may be suitable, in larger enclosures, more probes will need to be used to demonstrate even temperature distribution throughout the commodity.** **b. When it is an import requirement of the process that a particular**

MANDATORY	INFORMATIVE
	number of probes be used, this should be followed.
3.2 Instruments referred to in 3.1 must be capable of ensuring accurate measurement of temperature.	3.2 a. Thermometers and probes should be capable of measuring to an accuracy of within + or - 1.0 degree Celsius over the required temperature range for the treatment, unless a greater degree of accuracy is required to meet import country requirements. b. Hygrometers should be capable of measuring to an accuracy within + or - 2 % humidity over the required range for the treatment.
3.3 The enclosure design must have enough hygrometers to ensure accurate measurement of humidity throughout the enclosure.	3.3 a. The number of probes is determined by the size of the treatment chamber and consignment size.
3.4 All instruments must record readings within 2% tolerance. Unless an import requirement requires greater accuracy, this must be followed.	3.4 a. Temperature recording charts shall be increments of not less than 0.3mm for each degree Celsius. b. Temperature readings shall be recorded on a chart in time intervals not to exceed four minutes between each reading.
3.5 Instruments must be capable of recording data.	3.5 a. Data should be recorded for all treatment runs with electronic or printed hard copies available to demonstrate time and temperature success.

MANDATORY	INFORMATIVE
HEAT, HUMIDITY DISTRIBUTION AND CORE TEMPERATURE	
4.1 The temperature of the consignment must be raised to the required temperature (and if required, humidity level) and then maintained at or above that temperature for the specified treatment exposure period.	**4.1** a. It is essential that the consignment or specified area is treated at the required temperature and (if required humidity) until the specified humidity is achieved.
4.2 An even distribution of heat must be maintained within the enclosure during treatment. Fans must be used to assist heat distribution.	**4.2** a. To assist even heat distribution multiple heat outlets and heat exchanger placement may be used. b. Wall/ceilings holes or leaks may cause uneven distribution of heat in a chamber. c. Temperature mapping to determine the heat distribution in the heat chamber should be done prior to its use and periodically there after. d. During temperature mapping, the monitoring probes must be located in the coldest spot or positioned at the furthest area is from the heat source of the enclosure. e. In case of hot air/dry heat treatment using conveyor belts, determining the right timing of the conveyor belt speed to run the consignment inside the enclosure is essential in achieving and maintaining the required temperature.
4.3 Even heat and (humidity if applied) distribution must be demonstrated throughout organic consignments or, at the specified area of treatment of inorganic consignments.	

MANDATORY	INFORMATIVE
4.4 Temperature must be measured in a way that ensures accurate measurement of the temperature and humidity (if applied).	
4.5 Temperature must be measured at the centre of the consignment or where a substitute is used, its centre, in accordance with 2.1.	**4.5** a. For treatments were temperature is unable to be recorded during treatment i.e. microwave, a process to ensure accuracy of measurement should be documented. b. In the case of organic consignments such as fruit, probes must be inserted in the centre most portion and must use the heaviest fruit amongst the fruit load in the treatment lot.
4.6 If heat sensing probes are used, holes must be no larger than necessary to accommodate the diameter of the probes and probes must be temporarily sealed in the holes in a manner that prevents conduction of heat from the exterior.	**4.6** a. Where a probe can be inserted into the consignment make sure it is completely encased by the consignment. Make sure you fill any holes or spaces temporarily filled to exclude air and ensure only the consignment temperature is recorded. b. In the case of timber a hole slightly larger than the diameter of the probe should be drilled into a piece with the largest cross section. The probe should then be inserted so that the tip is at the cross sectional centre. Then seal the probe into the hole to stop airflow interfering with the temperature recording. Probes should not be inserted close to metal objects (e.g. nails, screws and bolts as the localised heat may give a false temperature reading). c. When drilling a hole that will damage the consignment e.g. furniture; a substitute, preferably of the same material, can be used.

MANDATORY	INFORMATIVE
	If the same material cannot be found for the substitute, find a similar product that is larger or harder to heat up than the material in the consignment. When the reading from the substitute has reached the required rate, it will indicate that the consignment has also reached the required rate.
	d. The initial temperature of the substitute should not be higher than the consignment.
	e. Substitutes should be regularly checked to ensure they are still suitable to use and not deteriorated causing inaccurate readings.
	f. Placing probes on top of the consignment will not give temperature readings of the consignment.
4.7 When treating inorganic consignments such as vehicles, steel or plastics, probes must be placed in the location expected to be the hardest to heat to the required temperature.	
4.8 An alternative method of determining temperature may be used where the type of heat source precludes the use of probes.	
4.9 Loading configuration guides showing the proper positioning of the monitoring probe must be displayed on the chamber. Probes must be placed in accordance with the guide.	**4.9 Results of the temperature mapping may be used as a basis for determining the exact location of monitoring probes inside the chamber during the treatment.**

MANDATORY	INFORMATIVE
CALIBRATION AND MAINTENANCE OF EQUIPMENT	
5.1 All instruments used for measuring and monitoring heat treatments must be fit for the purpose and in good working order. All instruments must operate within the manufacturer's tolerances.	
5.2 Temperature and humidity measuring equipment must be calibrated in accordance with manufacturer's instructions, documented treatment requirements or not less than every six months.	**5.2** a. Calibration records should include equipment serial numbers, calibration date, and expiry date.
5.3 Records of calibration must be kept on site.	b. Note that some quarantine heat treatments have a specific calibration process and frequency, e.g. USDA requirements for hot water dipping of fruit.
5.4 The calibration details must be displayed on the equipment.	

MANDATORY	INFORMATIVE
PRE-TREATMENT CONSIDERATIONS – CONSIGNMENT AND RATE	
6.1 The treatment provider must ensure the consignment including any associated packaging is suitable for heat treatment.	**6.1** a. Some consignments, for example lacquered or varnished items may be unsuitable for heat treatment. b. Unsuitable consignments may: • Change in colour • Become brittle.
6.2 Any unsuitable packaging and/or wrapping must be removed prior to treatment.	**6.2** a. Unsuitable packaging or wrapping can be defined as something that may: • Melt • Shrink • Burn • Ignite or; • Restricts the penetration of heat throughout the treatment process. b. After treatment, items may need to be rewrapped or packed.

MANDATORY	INFORMATIVE
6.3 Treatment providers must perform heat treatments that meet the specific quarantine requirements of the consignment for the importing country including: • Import Conditions • Permit conditions to import quarantine risk material.	**6.3** a. Treatment providers should check all the listed mandatory requirements before starting the heat treatment.
LOADING THE CONSIGNMENT	
7.1 The enclosure must be loaded in such a way that the consignment does not obstruct inlets or outlets when the chamber is fully loaded.	**7.1** a. The treatment provider will need to consider varying shapes and sizes of the consignment and make the best decision for loading the enclosure.
7.2 The enclosure must be loaded in a way that allows effective heat circulation throughout the consignment.	**7.2** a. If the enclosure is not loaded correctly, the heat will not be able to circulate and this may result in areas of the consignment not receiving the required temperature rates, resulting in a failed treatment. b. To assist heat circulation: c. Availability of free air space is recommended on the sides of the stacking. d. Timber will need the placement of wooden spacers (stickering) to

MANDATORY	INFORMATIVE
7.3 If a loading configuration has been determined for a particular chamber and consignment, it must be followed.	**separate the individual timber items;** **e. Bags of grain on pallets should have an open column in the centre to allow effective circulation of heat to the consignment.** **f. In the case of steam/vapour heat treatment, filling crates should be well perforated in the bottom to ensure smooth heat flow and circulation and sides should be properly enclosed to avoid heat escape.**

MANDATORY	INFORMATIVE
PERFORMING, MONITORING AND RECORDING THE HEAT TREATMENT	
8.1 The treatment exposure time begins when the core temperature of organic consignments or the surface of inorganic consignments have reached and can be maintained at or above the specified core temperature; and any required humidity level has stabilised.	**8.1** a. The temperature and (if required humidity) readings should be recorded every 2 minutes for treatments up to 2 hours and every 5 minutes for treatments over 2 hours. If there is a specific import requirement that requires temperature checks at a different timeframe. Those requirements should be followed. b. Some treatments will require data to be recorded in a specific format.
8.2 All readings from temperature measuring equipment and (if required hygrometers) must be recorded during the treatment.	
8.3 The readings from probes and hygrometers must be individually identifiable so that the source and location of any problems can be readily identified.	**8.3** a. Individually identifiable means that, for example, sensor one, two and three data readings can be easily identified on the data records.
8.4 The treatment is regarded as successful when the required temperatures (and where necessary, humidity levels) have been maintained for the required duration: (a) throughout the organic consignments or (b) on the entire surface of inorganic consignments.	

MANDATORY	INFORMATIVE
8.5 **Treatment is considered failed if at any point during the exposure period, the temperature falls below the specified temperature. After rectifying the cause of failure, the treatment should continue until the treatment requirement is satisfied.** **8.6** **The following details of each heat treatment conducted must be recorded on the record of treatment:** • **Company name** • **Address of treatment facility** • **Accreditation number** • **Operators name** • **Consignment description** • **Amount/weight/dimensions of consignment** • **Consignment identification** • **Specified treatment rate** • **Heat enclosure number (for multiple enclosures)** • **Substitute used and details** • **All temperature and if required humidity readings** • **Start and finish time and date** • **Treatment result** • **Copy of certificate (can be attached).**	

MANDATORY	INFORMATIVE
8.7 Security measures must be in place to prevent tampering or alteration of data recordings and system settings	

MANDATORY	INFORMATIVE
PACKING AND STORAGE AREAS	
9.1 Treated and untreated consignments and packaging must be kept segregated and stored separately. Treated commodities and their packaging must be stored to maintain freedom from infestation and contamination. **9.2** The facility must be kept clean, tidy and free from pests. **9.3** Where consignments are to be packed after treatment the consignment must be discharged directly into insect proof secure handling and dispatch rooms.	**9.1** a. Segregated means that treated and untreated consignments are separated by a physical barrier sufficient to prevent the movement of pests of concern between consignments.
CLEANING AND PEST CONTROL	
10.1 The facility must be kept clean, tidy and free from pests.	**10.1** a. Storage areas that are clean, insect proof and have impervious floors, will generally meet the requirements of this part. Insect proof means no external gaps greater than 1.6mm.

MANDATORY	INFORMATIVE
	b. The treatment provider should control pests and vermin in the facility. **c. There should be regular cleaning of the storage areas**
DOCUMENTATION	
11.1 All records must be kept for a minimum of 2 years. **11.2 Consignments must be identifiable in a manner that allows traceability from receipt to discharge from the facility.** **11.3 Records should contain sufficient detail to enable verification of any treatment at audit.** **11.4 The following records must be kept onsite and made available during audit:** • **Calibration records** • **Record of treatment** • **Staff training records** • **Maintenance records and reports** • **Loading configuration and probe placement diagram of the enclosure.**	**11.1 a. Documentation associated with a heat treatment should be recorded and kept in a secure location and be available for audit purposes for a minimum of 2 years.** **11.3 a. Completion of all the details required for the record of treatment (9.4) and any further associated documentation should meet the requirement of this part.**

MANDATORY	INFORMATIVE
• **Substitute use details** • **Cleaning records** • **Pest control records** • **Purchase receipts; and** • **Company treatment procedures manual,** • **Treatment requirement checklist** • **The information provided on the heat treatment certificate must be accurate.**	

HEAT TREATMENT CERTIFICATE

Certificate number: | **Registration number:**

TARGET OF TREATMENT DETAILS

Name of Consignment:.....

Consignment link:.....
Official documents:: .....

Amount of consignment:.....

Country of origin: ..... Port of loading: ..... Country of destination: .....

Name and address of exporter:	Name and address of importer:
.....	.....
.....	.....
.....	.....

TREATMENT DETAILS

Date treatment completed: ...../...../..... Place of treatment:.....

Core temperature(°C): ..... Exposure period (hrs): .....

Humidity rate (%) (where applicable): ..... Treatment method : ……..

Were probes inserted into the consignment?

☐ Yes ☐ No, explain below

Explain substitute use or alternative method used to satisfy treatment requirements:.....

……..

DECLARATION

By signing below, I, the accredited treatment provider responsible, declare that these details are true and correct and the treatment has been carried out in accordance with the required heat treatment schedule.

ADDITIONAL DECLARATIONS

.....

.....

....
Signature Date

....
Name of Accredited treatment provider Accreditation Number

Company stamp

APPENDIX A2: How to complete the Biosecurity Heat Treatment Certificate

How to complete the Biosecurity Heat Treatment Certificate

Details of the consignment and information relating to the treatment must be included on the heat treatment certificate for it to be accepted by the importing country. This information should be on a single page and in a format consistent with the above template. Following is advice on completing this treatment certificate template.

Biosecurity will accept only treatment certificates from accredited countries issued by a treatment provider on the Acceptable Treatment Providers list (TPL).

NOTE: False declarations may result in treatment provider being suspended or withdrawn. The consignment may also be refused entry to the country.

Certificate must be on the treatment provider's letterhead

The letterhead must include the address of the heat treatment provider that matches the address published on the biosecurity TPL. Where a company has more than one branch, the address on the letterhead must match that on the TPL for the branch that issues the certificate.

Certificate Number / Registration Number

Each certificate must include a unique certificate number issued by the treatment provider and the treatment provider's Registration Number. For audit and investigation purposes, the certificate number must link to the treatment provider's treatment records for the treatment covered by the certificate.

Official Documents

The certificate must include a link to some other official documentation related to the consignment such as a bill of lading number, quarantine entry number, commercial invoice number, preferential tariff certificate number, packing list number, letter of credit number or container number. If there is insufficient room on the certificate, you may use the additional declarations field or attach a complete list to the certificate.

Consignment Details

The certificate must also include the country of origin, the intended port of loading and country of destination as well as the name and addresses of the exporter and importer.

Treatment Details

- Date heat treatment completed: is the date at the conclusion of the heat treatment.
- Place of heat treatment: is the address in which the heat treatment took place.
- Exposure period (hrs): is the prescribed duration of the treatment.
- Target temperature (°C): is the specified core treatment temperature in degrees Celsius.
- Humidity rate: is the amount of humidity required in the chamber during the period of treatment. This is only required to be completed when moist heat treatments are conducted.
- Treatment method: what sort of treatment, microwave, moist heat, hot water, etc.
- Substitute used: the use of a substitute when the consignment cannot be drilled for a core probe. E.g. antique goods or steel.
- Substitute explanation: Description of the size, type and location in the chamber of the substitute.

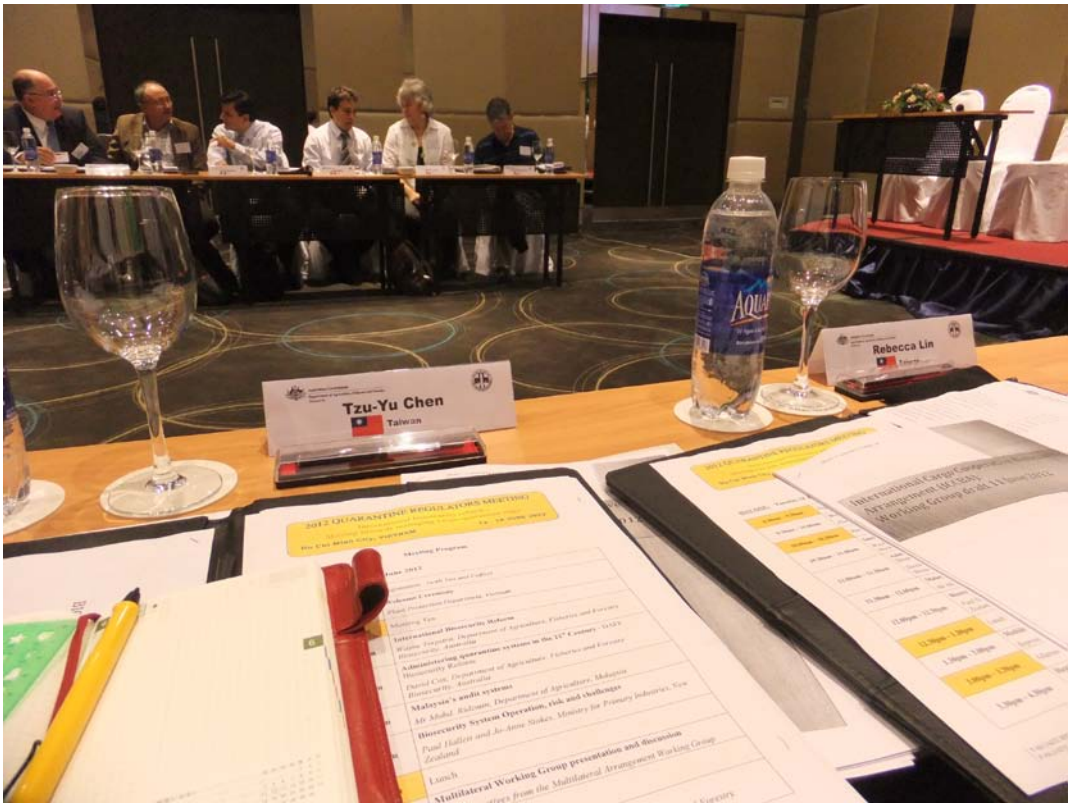
Declaration

The accredited treatment provider (or accredited officer if the certificate is endorsed by the relevant regulatory authority) responsible for ensuring that the treatment is effective and performed according to the requirements of the import conditions must sign and date the certificate and print their name and accreditation number. They may also wish to stamp the certificate with their government/company stamp.

Additional Information

Any additional information that the treatment provider wishes to supply may be included in the Additional Declarations field.

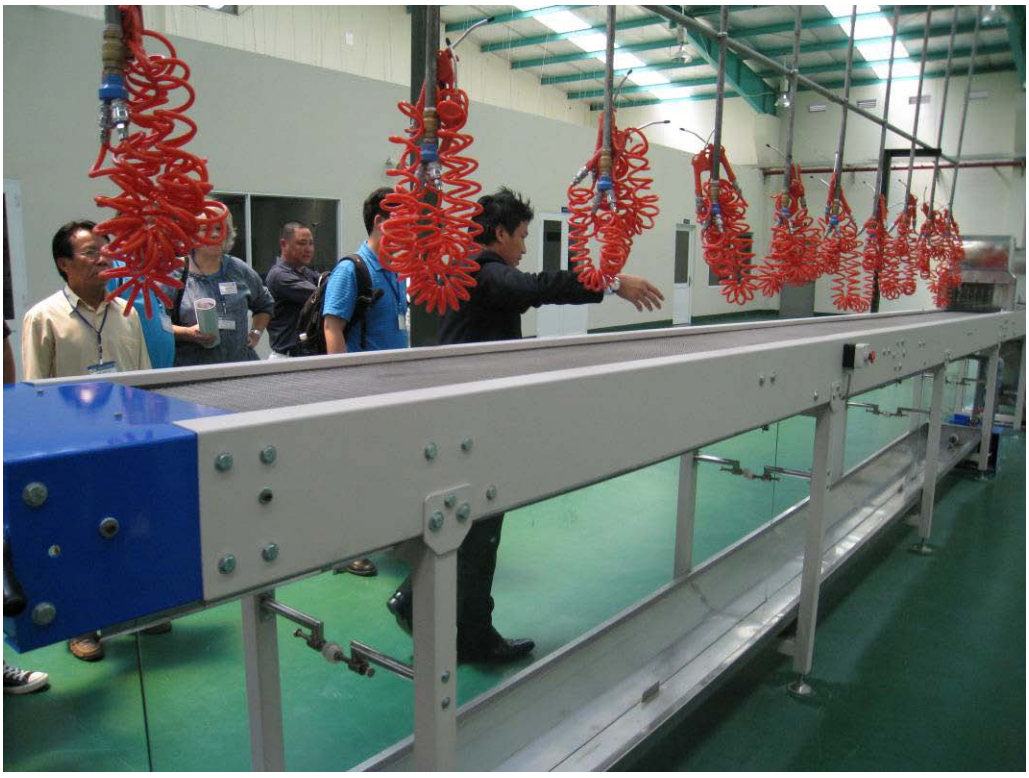
圖一、全體與會人員合影



圖二、我國代表席次

圖三、會議進行情形

圖四、Good Life Co., Ltd.總裁Mr. Hiroyuki Oda進行簡報



圖五、Good Life Co., Ltd蒸熱場鮮果選別設備

圖六、我國代表與斐濟代表（左一）與新加坡代表（右一）合影

圖七、古芝地道文化參訪情形

圖八、我國代表與菲律賓代表合影