

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
PLANT PROTECTION AND QUARANTINE

APPLICATION FOR USDA HOT WATER TREATMENT FACILITY APPROVAL

FOR USE IN CONDUCTING QUARANTINE HOT WATER TREATMENTS UNDER USDA REGULATIONS

INSTRUCTIONS

- a. Use one application for each facility.
- b. Review the regulatory requirements in Chapters 3 and 6 of the USDA Treatment Manual. An electronic PDF document of the manual is available at the following website: https://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/treatment.pdf.
- c. Each application must include technical documents that support the information supplied. Please attach the supporting documentation in the form of a PDF or Word file. Please combine all supporting materials in one document. The page number requested for specific technical information should be the PDF or Word document page number. Any large blueprints can be attached as a separate file. These drawings need to be in a high resolution format so that details can be clearly seen.
- d. Fill in each field of the application completely. Review of the application will not begin until all information is received. If a field is not applicable, please put "N/A" in the space provided.
- e. All responses and supporting materials in this application must be written in English.
- f. After receiving all requested information and required documentation, application approval may take as long as 60 (sixty) days.
- g. Once the application has been approved by APHIS-S&T, an onsite certification inspection may be scheduled.
- h. Facilities located in the United States should contact USDA-APHIS PPQ Field Operations (PPQ.Ops.Treatments@usda.gov) to discuss the certification process and requirements.
- i. Facilities located in countries other than the United States should contact the National Plant Protection Organization (NPPO) in their country to request information and submit their applications. The foreign country NPPO will then forward the application to USDA-APHIS International Services. (Your applicable International Services office can be located at https://www.aphis.usda.gov/aphis/ourfocus/internationalservices/contact_map.) Applications will then be forwarded to PPQ Phytosanitary Issues Management (PIM), and finally Preclearance and Offshore Programs (POP). Foreign facilities should not contact PPQ without first consulting with their NPPO.
- j. Questions regarding the application should be routed to:

USDA-APHIS-PPQ-S&T-TMT
Phone: +1-305-278-4877
ppqmt@usda.gov

1. CONTACT INFORMATION

Requestor

This information will be used by USDA as the official contact information for this facility.

NAME OF COMPANY	NAME AND TITLE OF OWNER
ADDRESS OF COMPANY HEADQUARTERS	TELEPHONE
	EMAIL

Agent Responsible for Facility Design/Construction (if different from Requestor)

NAME OF COMPANY	NAME OF AGENT
ADDRESS OF AGENT	TELEPHONE
	EMAIL

1. CONTACT INFORMATION, CONTINUED

Location of Treatment Facility

NAME OF FACILITY	STAMP NUMBER (if applicable)
------------------	------------------------------

STREET ADDRESS OF FACILITY

CITY	STATE/PROVINCE	POSTAL CODE	COUNTRY
------	----------------	-------------	---------

(Required) Attach a map showing the location of the treatment facility (drawing or satellite map).
Indicate the page number(s) where this item can be found in the attached technical documentation.

PAGE NUMBERS / FILENAME

2. TYPE OF REQUEST

What type of request is this? (Check one only)

- Request for approval of a new facility. (Facility is fully built and all equipment is in place.)
- Request for approval of plans to begin construction of a new facility. (For this type of request, only fill out sections 1 and 2 and attach facility drawings/plans. When the facility is fully built and all equipment is in place, you will need to submit a full application.)
- Request for approval of modifications to an existing facility that was previously certified by USDA.

If this is a request for approval of modifications to a facility that was previously certified, ONLY complete the sections below where changes have been made since the last time the facility was certified. If no changes have been made for a particular section, leave it blank.

If requesting approval of modifications to an existing facility, please describe each modification below:

3. OPERATING PROCEDURE

(Required) Attach a written description of all operational processes of the facility, including the work flow of the treatment process from fruit reception to shipping, and a description of how the hot water treatment begins and concludes.

PAGE NUMBERS / FILENAME

Indicate the page numbers and filename where this information can be found in the attached technical documentation.

Does this facility have a plan to remove culled, cut, and rotting fruit from the premises on a daily basis?

YES NO

4. DESIGN / LAYOUT

General Design

TYPE OF HOT WATER FACILITY (Check one only) <input type="checkbox"/> Batch System (Jacuzzi) <input type="checkbox"/> Continuous Flow System	FOR BATCH SYSTEM, PLEASE INDICATE Number of hot water tanks: _____ Number of baskets per tank: _____ Number of boxes per basket: _____ WILL THERE BE A HYDRO-COOLING TANK? <input type="checkbox"/> YES <input type="checkbox"/> NO If YES, how many hydro-cooling tanks are there? _____	FOR CONTINUOUS FLOW, PLEASE INDICATE Number of sensors per tank (must be >10): _____ Is there a belt speed indicator (encoder) installed? <input type="checkbox"/> YES <input type="checkbox"/> NO
---	--	---

(Required) Attach a facility diagram or architectural drawings showing all aspects of the facility. The borders of the entire quarantine section must be clearly indicated. All entrances into the quarantine section must be clearly labeled and the safeguarding measures must be identified as well (i.e., air curtains, double doors, etc.). The facility drawing can be submitted as a separate file. Either way, the drawing must be in high resolution so that it can be expanded in order to see all features clearly.

PAGE NUMBERS / FILENAME

4. DESIGN / LAYOUT, CONTINUED

For each item, indicate the page numbers where this information can be found in the attached technical documentation.

Quarantine Section (Fruit Packing Area)

Is a diagram included that clearly shows the entire border of the quarantine area?	<input type="checkbox"/> YES <input type="checkbox"/> NO	PAGE NUMBERS / FILENAME
Are all entrances into the quarantine area indicated on diagrams?	<input type="checkbox"/> YES <input type="checkbox"/> NO	PAGE NUMBERS / FILENAME
Do all entrances and exits to the quarantine area have quarantine security measures?	<input type="checkbox"/> YES <input type="checkbox"/> NO	PAGE NUMBERS / FILENAME
Is the entire quarantine area enclosed by walls and/or screens without any holes or gaps?	<input type="checkbox"/> YES <input type="checkbox"/> NO	PAGE NUMBERS / FILENAME
Is the insect proof screen 100 meshes per square inch or greater?	<input type="checkbox"/> YES <input type="checkbox"/> NO	PAGE NUMBERS / FILENAME
Do all loading docks have loading dock boots (cushions that tightly seal against the rear doors of the truck)?	<input type="checkbox"/> YES <input type="checkbox"/> NO	PAGE NUMBERS / FILENAME

Control Room

Does the control room overlook the treatment tanks?	<input type="checkbox"/> YES <input type="checkbox"/> NO	PAGE NUMBERS / FILENAME
Is the control room air conditioned?	<input type="checkbox"/> YES <input type="checkbox"/> NO	PAGE NUMBERS / FILENAME
Are there bathroom facilities inside or nearby the control room?	<input type="checkbox"/> YES <input type="checkbox"/> NO	PAGE NUMBERS / FILENAME

5. EQUIPMENT

Mechanical Infrastructure

TREATMENT TANKS ARE HEATED BY <i>(Check one only)</i> <input type="checkbox"/> Central Boiler System <input type="checkbox"/> Individual heating units for each tank	IF USING BOILER SYSTEM, Please indicate BTU and units: Facility plans must show piping going from boiler to tanks.	PAGE NUMBERS PAGE NUMBERS
--	---	----------------------------------

Fruit Sorting Machine

All systems must be able to accurately segregate fruit into weight classes.

MANUFACTURER AND MODEL OF FRUIT SORTER	PAGE NUMBERS
MANUFACTURER AND MODEL OF DIGITAL SCALE <i>(Used to verify weight classes)</i>	PAGE NUMBERS

Hot Water Treatment Tanks

<input type="checkbox"/> <i>(Required)</i> Attach a tank schematic showing dimensions, motor and propellers for water circulation, direction of water flow, probe location, inflow and outflow pipes leading to and from the boiler (only if the boiler is situated away from tanks).	PAGE NUMBERS
Will the fruit be submerged at least 4 inches (10.2 cm) below the water's surface during treatment?	<input type="checkbox"/> YES <input type="checkbox"/> NO PAGE NUMBERS
Will the crates that are used during treatment have adequate openings for water circulation on all sides?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A PAGE NUMBERS
<input type="checkbox"/> <i>(Required)</i> Attach pictures of crates for holding fruit, if applicable.	
Is there a micro-switch or some other method to automatically activate the treatment process as soon as the basket is lowered into the treatment tanks?	<input type="checkbox"/> YES <input type="checkbox"/> NO PAGE NUMBERS / FILENAME
Is there an alarm system that signals when the treatment process starts and ends? This can be achieved with either audible or visual alarms or both.	<input type="checkbox"/> YES <input type="checkbox"/> NO PAGE NUMBERS / FILENAME
Will the water that is used for washing, dipping, hydro-cooling or showering the fruit be chlorinated at no greater than 200 parts per million?	<input type="checkbox"/> YES <input type="checkbox"/> NO PAGE NUMBERS / FILENAME

5. EQUIPMENT, CONTINUED

Tank Sensors

Are the permanent tank sensors 100-Ohm resistance temperature detectors (RTD)?	<input type="checkbox"/> YES <input type="checkbox"/> NO	PAGE NUMBERS
Do the tanks with 1 basket have at least 2 sensors per tank?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	PAGE NUMBERS
Do tanks with multiple baskets have at least 1 sensor per basket?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	PAGE NUMBERS
For continuous flow systems, are there at least 10 sensors?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	PAGE NUMBERS
Are the sensors in the lower third of the tank?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	PAGE NUMBERS
Is at least one sensor located near the outflow of the tank where temperatures will be coolest?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	PAGE NUMBERS
Is at least one sensor located near the inflow of the tank where temperatures will be warmest?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	PAGE NUMBERS

Temperature Recorder *(must be approved by USDA)*

Is the recorder a USDA-approved model? YES NO

MANUFACTURER	MODEL	QUANTITY OF RECORDERS
--------------	-------	-----------------------

(Required) It is required that the recorder system be tamper-proof (password protected), accessible only by PPQ and by the National Plant Protection Organization for each country. This is to ensure that the set points cannot be altered once the tanks are certified and the temperature set points are set for the season. Attach a screen-shot of the monitor showing the password protection. **Are recorders password protected and tamper-proof?**
 YES NO

(Required) Attach recorder printout that shows: correct number of tanks, temperature in °C or °F, time stamp and date when treatment was initiated and when treatment finished, process status and alarms. Must show all unique tank numbers and sensor names. (For continuous flow, belt speed must be controlled by recorder and must be captured on recorder printout). Indicate the page numbers and filename where this information can be found in the attached technical documentation. PAGE NUMBERS / FILENAME

Air Curtains

Note: Research for the exclusion of insects using a horizontal air curtain over an opening indicates that the wind speeds should be 18 mph (8 m/s) or higher at 3 feet (92cm) at a 15° angle from the floor.

All entrances into the Quarantine Area require phytosanitary protection to exclude the entrance of fruit flies. Please indicate the protections that are in place for each opening. If this facility uses a continuous flow system, information on phytosanitary protections may be provided on diagrams rather than completing the table below.

Opening into the Quarantine Area	a. Air Curtains present?	b. Air Curtain Manufacturer/Model	c. Height of Opening (feet)	d. Double doors present?	e. Plastic flaps (Hawaiian curtains) present?
TREATMENT TANK BASKET ENTRANCE <i>(required a, b, c)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO			<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
PERSONNEL ENTRANCE <i>(required a, b, c, d)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO			<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
CRATE EXIT <i>(required a, b, c, e)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO			<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
BOX ENTRY <i>(required a, b, c, e)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO			<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
OTHER <i>(please explain)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO			<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
OTHER <i>(please explain)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO			<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO

IF USING PLASTIC FLAPS (HAWAIIAN CURTAINS), IS THERE A DOOR THAT SEALS THE OPENING WHEN NOT IN USE? YES NO

(Required) Attach pages from all air curtain manuals listed above showing air curtain velocity. PAGE NUMBERS / FILENAME

Hydro-cooling tanks

What method of cooling will the facility employ? (Check all that apply) PAGE NUMBERS / FILENAME

HYDRO-COOLING TANK AIR-COOLING

If using hydro-cooling, what protocol will the facility employ? (Check all that apply) PAGE NUMBERS / FILENAME

WAIT 30 MIN BEFORE HYDRO-COOLING

EXTEND TREATMENT TIME BY 10 MIN

(Required) Attach architectural drawings showing location of the hydro-cooling tank(s). PAGE NUMBERS / FILENAME

5. EQUIPMENT, CONTINUED

Is the hydro-cooling tank within the Quarantine Section?

YES NO N/A

PAGE NUMBERS

Does the treated fruit enter the Quarantine Section immediately after being treated?

YES NO N/A

PAGE NUMBERS

Will the water in the hydro-cooling tanks be maintained at a temperature of 70°F or higher?

YES NO N/A

PAGE NUMBERS

Equipment for Facility Certification

Each facility is required to have its own calibrated mercury, non-mercury, or digital reference thermometer. This equipment requires approval. Approved models are listed in Appendix E of the Treatment Manual.

Please indicate the digital reference thermometer manufacturer/model:

Is this an approved model?

YES NO

Who will supply the portable digital thermometers and sensors for certification?

THE FACILITY (PLEASE FILL OUT THE NEXT SECTION)

OTHER PARTY, PLEASE SPECIFY WHO:

The portable digital thermometers and sensors used during certification require approval. Approved manufacturers/models are listed in Appendix E of the USDA Treatment Manual.

Are the digital thermometer and sensors USDA-approved equipment?

YES NO

PAGE NUMBERS

Are there a minimum of 24 sensors for your facility?

YES NO

PAGE NUMBERS

Are the cable lengths of the sensors greater than 10 feet?

YES NO

PAGE NUMBERS

6. SAFETY

Are steam and hot water pipes insulated or otherwise protected?

YES NO

Are safety plates installed on all pulley and belt systems?

YES NO

Do all catwalks and stairways have railings for safety?

YES NO

Is there sufficient lighting in all working areas?

YES NO

Does the facility have fire extinguishers?

YES NO

Does the facility have a first aid kit?

YES NO

Does the facility have a method to maintain water quality to keep it free from microbial contamination?

YES NO

Are all electrical systems earth-grounded?

YES NO

Does all electrical wiring throughout the facility meet both international, as well as local safety code requirements?

YES NO

Does the facility use a commercial line conditioner (surge protector) to protect computers and microprocessors? *(Recommended, not required)*

YES NO

Does the facility have a back-up generator in case of power outages? *(Recommended, not required)*

YES NO

7. ATTACHMENTS (supporting documentation)

Are the following technical documents included in the submission attachments? Please indicate filenames in the space provided. (Note: They do not have to be separate files.)

Map showing location of treatment facility/packinghouse

FILENAME:

YES NO

Narrative describing the operational procedure and work flow of the treatment process

FILENAME:

YES NO

Facility diagrams or architectural drawings showing all aspects of the facility, including the entire borders of quarantine area and locations of hydro-cooling tanks

FILENAME:

YES NO

Tank schematic

FILENAME:

YES NO

Pictures of crates for holding fruit

FILENAME:

YES NO N/A

Recorder printout

FILENAME:

YES NO

Tamper-proof statement for recorder

FILENAME:

YES NO

Pages from air curtain manuals showing velocity

FILENAME:

YES NO

8. ADDITIONAL INFORMATION

Information critical to treatment at your facility not otherwise captured in this application form. Please describe below:

9. REQUESTOR SIGNATURE

SIGNATURE

PRINT NAME

DATE (mm/dd/yyyy)