Solid Wood Packing Material

by Michael Hicks, Trade Policy Coordinator

At any given time of the day or night, there are several billion dollars' worth of goods in route by truck, rail, air, and sea to customers here and abroad. A significant proportion of these goods are shipped in wooden containers or on some type of wooden platform (e.g., pallets).

Pallets are used to load, store, and protect goods ranging from fruits and vegetables and frozen chicken to mainframe computers and stereo components as they are moved from the factory to the warehouse to the neighborhood store or to the buyer overseas.

Right now, there are an estimated 2 billion pallets in use in the United States. It is estimated that well over one-half of the $1.7 trillion worth of the goods that entered or left the United States in 1999 used some form of solid wood packing material. According to the National Wooden Pallet and Container Association, there were an estimated 454 million pallets produced in the United States in 1999, consuming upward of 7 billion board feet of lumber, representing well over 10 percent of total U.S. lumber production. Last year, another 225 million pallets were recycled–or, more specifically, they were repaired and put back into service.

It is estimated that 95 percent of the pallets produced in 1999 were made from lumber, another 2 percent from plywood and oriented strand board, and the remainder from plastic, steel or other materials. Lumber has historically been the material of choice for any number of reasons, not least of which is ease of manufacture and cost. Wooden pallets have a range of durability; they can be designed to last for one trip or for years of reliable service.

Recently, concerns have been expressed that wooden containers and pallets can carry more than their intended loads. They can potentially serve as pathways for the introduction of quarantine pests. Nor are pallets the only materials that are subject to concern. Other solid wood packing material (SWPM)–wood dunnage, crating, cable spools, packing blocks, drums, cases and skids–are also perceived to be pathways. (It's important to note, though, that not all materials are able to harbor pests. For example, wooden containers and pallets manufactured from highly processed wood products such as plywood, oriented strand board and corrugated paperboard are not considered solid wood packing material from a regulatory point of view).

Keeping Pests Out of the Packing

The introduction of exotic pests is of significant concern not only to plant health officials but to those who could be impacted by these pests. We only have to look back at history to see the impact of introducing exotic pests or diseases into an environment where there are no natural enemies. For example, the introduction of chestnut blight into the United States, presumably from eastern Asia, all but wiped out the American chestnut tree in the early 1900s. Dutch elm disease, introduced in the 1920s, has raised questions about the continued existence of the American elm. More recently, an outbreak of the Asian longhorned beetle led to the destruction of scores of hardwood trees in New York and Chicago.

Risk Consciousness Spreads Worldwide

Australia and New Zealand were two of the first countries to recognize the risks associated with SWPM. Several other countries have also implemented (or announced they will implement) requirements for SWPM. In November 1998, Canada, Mexico, and the United States, under the auspices of the North American Plant Protection Organization (NAPPO), agreed on the elements of a common standard to address the risks associated with SWPM. All three countries have initiated regulatory action that will ultimately result in national standards that comply with the NAPPO standard.

USDA's Animal and Plant Health Inspection Service (APHIS) has just completed a draft Pest Risk Assessment that analyzes the risks associated with solid wood packing material. This will be followed by a Pest Risk Reduction Analysis of the environmental and economic impacts of various alternatives to minimize the risks associated with SWPM. A proposed rule is still many months off and it could be at least the second half of 2002 before any new regulation is in place in the United States.

Keeping Pests Out of Packing Material

In the interim, the United States is relying on self-declaration by importers– with the exception of SWPM from China and Hong Kong. This declaration states that the SWPM is free of bark and apparently free of insects. APHIS recorded upward of 200 interceptions of pests in SWPM at the U.S. border in 1999.

Allied Against the Asian Longhorned Beetle

On September 18, 1998, following repeated interceptions of Asian longhorned beetle (ALB) and the discovery of the ALB in 26 locations throughout the United States (mainly in and around import warehouses containing SWPM from China), APHIS cracked down. The agency published an interim rule in the *Federal Register* requiring that all cargo containing SWPM leaving Chinese ports on or after December 17, 1998, be certified by the Chinese Government as heat-treated, fumigated or treated with preservatives prior to arrival in the United States. (Highly processed wood materials such as plywood and oriented strand board were not subject to the requirements.)

Inspectors are on the alert. In fact, if a cargo contains no SWPM, it must carry an exporter's statement certifying that the shipment contains none. It is estimated that between one-quarter and one-half of China's exports to the United States (valued at $42 billion in 1999) were affected by the change.

Pest Concern Heightens Worldwide

The United States is not the only nation that's working to fend off the risk of introducing pests in packing material. Brazil has also implemented regulations requiring SWPM from China, Hong Kong, Japan, North and South Korea, Taiwan, and the United States be fumigated and accompanied by a phytosanitary certificate.

On April 14, 2000, Brazil removed the United States from its list of countries whose solid wood packing material must be fumigated and accompanied by a phytosanitary certificate. This took place after the United States put in place an eradication program to prevent the spread of the ALB outside of the New York and Chicago metropolitan areas.

Fencing Out the Pinewood Nematode

On January 1, 2000, China began requiring that coniferous SWPM shipments from the United States and Japan must be treated to prevent the spread of the pinewood nematode (PWN).

China is not the only country in recent years to put in place regulations to address the risks associated with the PWN. Beginning January 1, 2001, the European Union (EU) intends to require SWPM made with wood from coniferous species from Canada, China, Japan and the United States to be either heat- or pressure-treated. The regulations would also require that the SWPM display an officially approved mark identifying the treatment facility.

A significant portion of the $150 billion in U.S. exports to the EU could be affected by the proposed rule in that more than 30 percent of all pallets (and probably a higher percentage of pallets used for export) are made from softwoods, as is a significant proportion of boxes and other containers. The United States has requested that the EU delay the implementation of the new rule, noting concerns over the scientific basis of certain provisions, work underway on an international standard, and the inability of the United States to put the necessary certification procedures in place by January 1, 2001.

Argentina is the most recent country to put in place new requirements for SWPM. Beginning in October, 2000, Argentina began requiring that all SWPM be free of bark, insects and signs of insect damage.

Towards an International Standard

Not surprisingly, given the proliferation of national standards, work is underway internationally under the U.N. Food and Agriculture Organization to develop an international standard.

In June 2000, representatives from 12 countries and several private sector organizations met in Ottawa, Canada, to begin work on the new standard. While a significant amount of work remains to be done, a general framework has been developed. It is clear that all SWPM will require treatment in the future. What is not clear is what that treatment will be. An *ad hoc* committee is currently comparing various treatments in terms of effectiveness, health, and environmental concerns. An international standard is still at least 18 months away.

Impacts on Various Players

What does all of this mean to you and me? Well, that depends on who you and me are. If we are one of the thousands of exporters that currently use wooden pallets and containers to move our products to market, it could mean that we use pallets and containers constructed of alternative materials (plywood, plastic or metal) in the future. At a minimum, we will probably have to pay more for our wooden containers. If we are one of the 3,000 or so wooden pallet and container manufacturers in the U.S., it could affect our livelihood. It is likely that many manufacturers who produce hardwood pallets–which represent over 70 percent of total pallet production– will find it difficult to meet the new requirements.

How much this will affect their overall business is unclear. It will depend on whether users are willing to purchase two different pallets, one for the domestic market

and one for the export market. Some manufacturers (i.e., producers of softwood pallets) could actually see their business increase. Since almost 40 percent of all hardwood lumber is consumed by the pallet industry, there are also implications for hardwood lumber producers and other sectors of the wood products industry. Loss of the pallet market for low-grade lumber could be devastating to the industry, and have a significant effect on the price for higher grade products.