

CINTRAFOR NEWS

The Center for International Trade in Forest Products

US Exporters Look Towards Emerging Markets for New Export Opportunities

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by Ivan Eastin, Professor and Director, CINTRAFOR

The combination of a weak US dollar and a weak domestic housing market have resulted in a significant reduction in demand for lumber in the US and led to a surge in wood product exports from the US. The steep decline in housing starts from over 2 million in 2005 to likely less than 1 million in 2008 has caused lumber consumption to plummet from 64.3 billion board feet (bbf) in 2005 to an estimated 45.3 bbf in 2008. With domestic demand off by almost 30%, wood products manufacturers have been increasingly looking to offshore markets to pick up the slack. Their efforts to increase exports have been helped considerably by the timely weakness of the US dollar which has fallen by 23% against the Japanese yen, by 37% against the euro and by 44% against the Canadian dollar since 2002, Figure 1. Perhaps the greatest impact of the weak US dollar is that it has significantly increased the competitiveness of US wood products relative to our major competitors in Europe and Canada. Between 2005 and 2007, US wood products exports increased by 14.3%, reaching a ten year high, and they increased an additional 3% in the first two months of 2008. As a result, the US trade deficit in wood products has declined by 28.8%, dropping from a record \$28.5 billion in 2005 to \$22.3 billion in 2007.

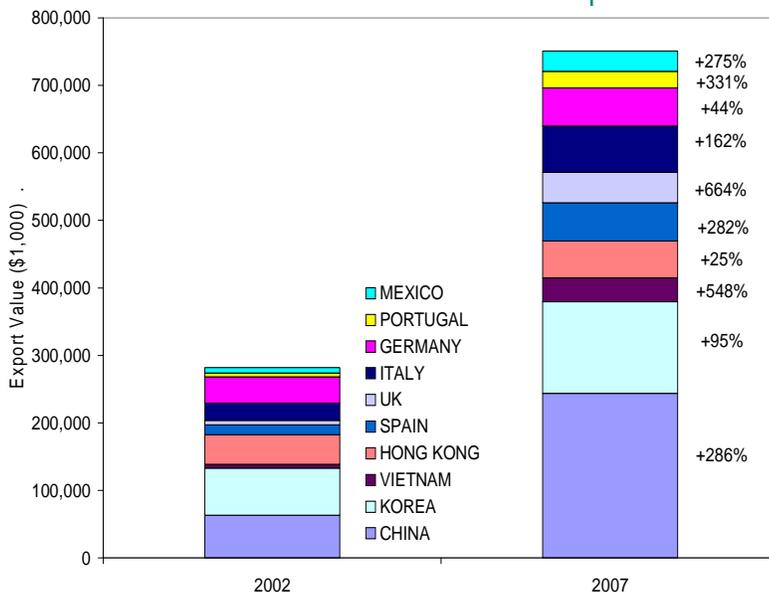


Figure 2. Log exports to emerging markets.

Over the past year there have been several interesting changes that have fundamentally changed the dynamics of US exports, including the changing mix of export destinations, the continued implementation of the Russian log export tariff and constraints on forest products exports within the shipping industry.

Figures 2-4 clearly show that US forest products exporters have been aggressive in exploring new emerging markets for export opportunities. In many cases the value of exports going into these new markets equals or exceeds the value of products being exported to traditional markets. For example, softwood log exports to Japan and Canada (the major traditional markets) totaled \$780 million in 2007 whereas log exports to the emerging markets shown in Figure 2 totaled \$751 million. Similarly, soft-

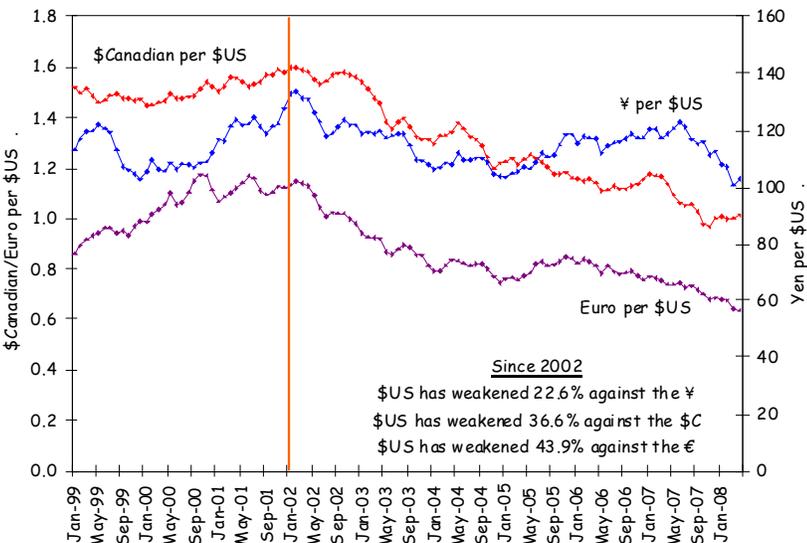


Figure 1. The US dollar has weakened substantially since 2002.

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Director's Notes

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Located in the Pacific Northwest, CINTRAFOR is administered through the College of Forest Resources at the University of Washington under the guidance of an Executive Board representing both large and small companies, agencies, and academics. It is supported by state, federal, and private grants. The Center's interdisciplinary research is carried out by university faculty and graduate students, internal staff, and through cooperative arrangements with professional groups and individuals.

While the downward spiral of the US housing market may begin to slow soon, the impacts of a series of events, including record high mortgage foreclosures, a slowing economy, falling housing values and huge inventories of existing and new homes sitting unsold in the market, suggests that the housing market is not poised for recovery in the short-term. Recent housing data show that new housing inventory has reached 11 months worth of houses sitting unsold in the market while there is a 10 month inventory of existing homes on the market. The combination these factors will not only suppress new housing starts for the foreseeable future but they will also likely reduce spending on repair and remodel activities, thus reducing lumber demand in the two largest lumber consuming sectors in the US. Housing starts in 2008 are forecast to be below 1 million for the first time in almost 40 years. As a result, lumber consumption in the new housing sector will fall from a record 27.6 billion board feet in 2005 to an estimated 12.3 billion board feet in 2008 with only a slight increase to 14.8 bbf being projected for 2009.

During the past twenty years, downturns in the economy that have resulted in reduced lumber consumption in the new housing sector have often been offset to some extent by increased consumption in the repair and remodel sector as more people invest in upgrades to their current home rather than purchase a new home. However, declining housing values have seriously impacted home owner's perceptions of their wealth and economic well being. For the first time in almost 20 years, the value of existing homes has begun declining as the result of a massive market correction in response to the huge run-up of housing values that began in 2000. The Standard & Poor's Case-Shiller Composite 10 Home Price Index shows that the home price index jumped from 100 in 2000 to 226 in 2006 before the market correction in home prices caused the index to fall to 186 in March 2008. This rapid decline in housing values occurred just after many homeowners

had recently refinanced their mortgages to tap into the equity of their homes that resulted from the huge run-up in housing values. The combination of higher mortgages and lower housing

values has caused many households to perceive themselves as being less economically well off today than they were in 2000. Consequently, many home owners are now reluctant to spend significant amounts of money on repair and remodel projects, thus reducing lumber consumption in this sector as well. Lumber consumption in the repair and remodel sector has decreased from a record 20.5 bbf in 2005 to an estimated 17.2 bbf in 2008 and 17.4 bbf in 2009.

Given the grim outlook for the US housing sector, it should come as no surprise that the US forest products industry is experiencing numerous plant closures, with many mills running below capacity and often selling products below production costs simply to maintain cash flow. Despite the grim state of the domestic market, there are a number of factors that have worked to increase the international competitiveness of US wood products, including the weak US dollar, the on-going implementation of the Russian log export tariffs and the adoption of public procurement policies in Japan and Europe that require certification of legality for wood products. These factors provide great opportunities for US wood products in foreign markets and recent trade statistics suggest that US exporters have been responding to these opportunities in off-shore markets, with US exports of wood products increasing from \$4.9 billion in 2003 to over \$6.8 billion in 2007. However, these increased exports have been directed less towards traditional markets (such as Japan and Canada), but increasingly towards a broad range of new and emerging markets in Asia and Eastern Europe. Identifying and accessing opportunities in these new and emerging markets increases the risk facing an exporter and greatly increases the need to adequately research market opportunities and constraints in these new markets.

Complicating the export situation is the fact that the increasing cost and reduced availability of containers and space on ocean vessels constrained the growth of US exports of wood products, particularly for high weight-to-value commodities such as softwood lumber, softwood logs and structural panels. However, despite these constraints, there is an incredible opportunity for US forest products manufacturers to once again become actively engaged in international markets. ▲



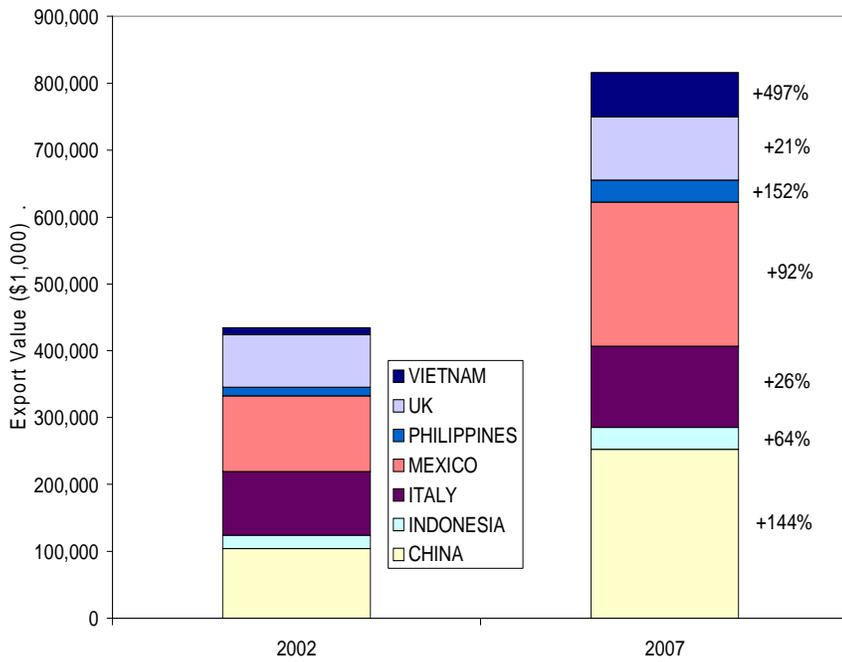


Figure 3. SW lumber exports to emerging markets.

wood lumber exports to Japan and Canada totaled \$605 million in 2007 while softwood lumber exports to the emerging markets shown in Figure 3 totaled \$816 million. These trends suggest that although US forest products manufacturers tend to focus on the domestic market, they are not adverse to exploring new export opportunities when domestic demand is weak. However, the key to long-term success for the US forest products industry is the recognition that export markets should be a critical component of their market mix, even during periods of strong demand in the domestic market.

The second factor that will influence the US forest products industry is the continued implementation of the Russian log export tariff. In April of this year Russia increased the log export tariff to 25% (but not less than 15 euros/cubic meter). More importantly, despite threats from the EU to delay or prevent Russia's entry in WTO, the Russian authorities have made it clear that they intend to increase the log export tariff to 80% (but not less than 50 euros/cubic meter) in January, 2009. Given the fact that Russia supplied 40% of log imports into Japan and 52% of log imports into China in 2007, the huge increase in the log export tariff planned for January 2009 will significantly reduce Russian log exports to these countries. This should provide new export opportu-

nities for a wide variety of US forest products, including logs, lumber, panels and value-added wood products. However, an understanding of how Russian logs are used within each importing country will be important in determining which types of wood products have the best opportunity in each country. For example, much of the Russian larch logs exported to Japan are used to produce face veneer for plywood while another major end-use in for smaller dimensions lumber used in post and beam construction (e.g., sill plates (*dodai*), roof rafters (*taruki*) and non-structural wall studs (*mabashira*)).

While export opportunities are set to expand, the growth of US forest products exports could be constrained by the low availabil-

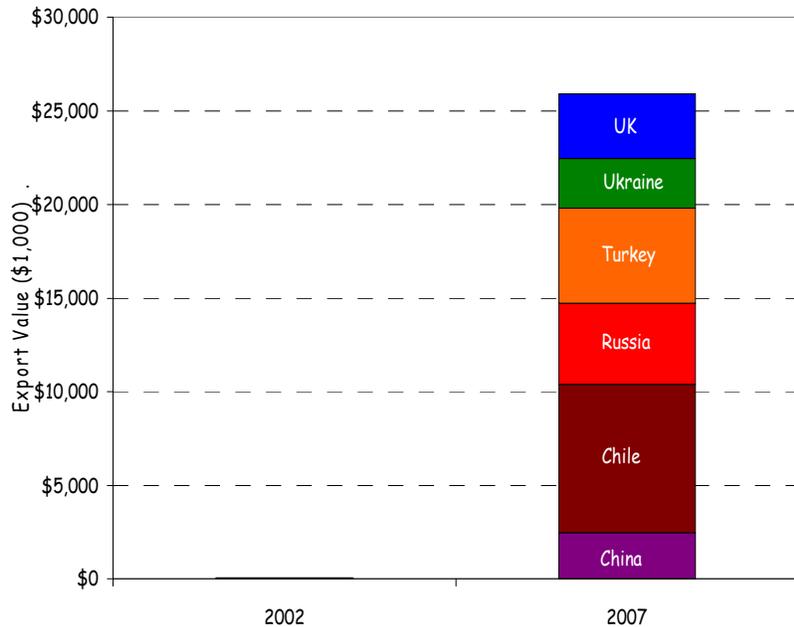


Figure 4. OSB exports to emerging markets.

ity of space on ocean vessels as well as rapidly rising shipping wood products when other lighter types of cargo are available for shipping. Thus, even as new export opportunities for US wood products emerge, a lack of shipping capacity and rapidly increasing shipping costs could restrict the ability of forest products exporters to service these new markets. ▲

A Review of Recent Trends in the Chinese Wood panel Industry

By Xiaozhi (Jeff) Cao and Ivan Eastin

China has become the world's No.1 producer and consumer of wood-based panel products. The industry's gross production has been growing at over 20% annually since 2001. As of 2007, there were over 6,000 panel companies operating in China with total annual production reaching 74 million m³. Plywood is the largest sector with 27 million m³ of annual production capacity, followed by MDF/HDF (24.3 million m³), blockboard or lumber core panel (10.5 million m³) and particle-board (8.4 million m³). Several factors are likely to continue shaping trends in the industry over the next few years:

Factor 1 - Cost Escalation

Cost escalation is the top concern for the Chinese manufacturers because they operate in one of the most energy and resource-intensive industries in the world (particularly MDF/HDF). Roughly one third of the country's total timber supply is met by imports, and more than one-half of timber imports are Russian logs. In 2007, China imported 37.1 million m³ of logs, and Russian logs accounted for more than two thirds of the total. Recent hikes in the Russian log export tariff and booming demand from the paper industry have pushed prices higher for both imported and domestic timber. Coupled with this, Chinese manufacturers are also facing lower rebates of value-added taxes, and increased labor and energy costs. Recent changes in export policies, including a newly instituted export tax on raw materials, have reduced or eliminated tax rebates and subsidies for finished goods. For MDF/HDF companies, high energy prices have also driven up production costs substantially due to the energy intensive nature of the production process. Resin is another major cost component in panel manufacturing. Recent supply constraints in methanol and urea markets have pushed up resin prices and put upward pressure on production costs for almost all panel producers.

Factor 2 - FDI, IPO Rush and A&M

Foreign direct investment (FDI) and domestic firms' rush to the stock market through initial public offerings (IPOs) are gradually changing the industry's ownership structure and preparing the industry for further consolidation through acquisitions and mergers (A&M) in the near future. At this point, most deals seem to be a positive development for the industry as all indications suggest that investors have no intention of selling off parts of



the company for a quick financial gain. Rather, investment appears to be focused on growing the business and generating solid economic returns over a long period. A case in point is

Shanghai-based A&W Wood Products, Ltd., which attracted over \$50 million of investment from overseas private equity firms and investment banks between 2006-2007. According to media reports, A&W will use the money to acquire a decoration material company and to build a new engineered wood flooring plant. Carlyle Group has used its distribution network in the US to help A&W launch the ARK brand of flooring in the US. As of 2007, A&W had successfully set up 50 sales outlets in the US with Carlyle's help. It can be expected that the Chinese wood panel industry will be further integrated into the global supply chain as strategic investors help set up joint ventures and provide access to their international networks. For many strategic investors, the fast-growing wood industry in China is increasingly attractive, given the difficulty of securing a controlling stake in State-owned enterprises in China.

Factor 3 - Rising Environmental Standards as Barriers to Exports

Chinese panel exports are facing both tariff and non-tariff barriers. The EU has put a 66.7% anti-dumping duty on Chinese Okoumé plywood exports. Also, the USITC is investigating alleged unfair commercial practices within the Chinese hardwood plywood flooring industry. These measures have significantly influenced Chinese wood panel exports. A recent case in point is the California Air Resources Board (CARB) Regulations¹, which placed formaldehyde emissions ceilings on particleboard and MDF as well as on value-added products containing particleboard and MDF (e.g., furniture) that are sold and/or consumed in California. Given the importance and size of the California market, Chinese exporters will need to meet these standards in order to maintain access to the California market. These changes will cause significant increases in production costs which might further erode Chinese imports' cost advantage in the U.S. In addition, green procurement policies adopted by the EU, Japan and the U.S. will potentially push Chinese manufacturers to use wood from sustainably managed forests and pursue internationally recognized Chain-of-Custody certification.

Factor 4 - A Changing Product Mix

The Chinese wood panel industry will increase production of particleboard and MDF/HDF in the next few years. Facing raw material supply constraints, the Chinese industry administration announced its plan to slow the capacity growth of the plywood sector, while encouraging further development of the particleboard and fiberboard sectors. The final goal is to change the relative

production proportion of plywood, fiberboard and particleboard from the current 50:35:15 to 40:40:20 by 2010. Fiberboard (primarily MDF) production is expected to match that of plywood and reach 26 million m³ in 2010, an increase of 26% from 2005 volumes. Largely constrained by the shortage of large diameter and tropical timber, the Chinese plywood sector is expected to post a slight growth of 3.4% from 2005's 25 million m³ to 26 million m³ by 2010 (although actual production of plywood in 2007 has already reached 27 million m³); the sector is likely to see a dramatic change in the product mix with an increase of exterior and structural grades. Particleboard production is expected to post the strongest growth, increasing by 126% from 5.8 million m³ to 13 million m³ in 2010. Finally, the production of other panel products, including blockboard used for interior decoration, is expected to reach 15 million m³ from 12.4 million m³ in 2005, up 21% (Figure 1).

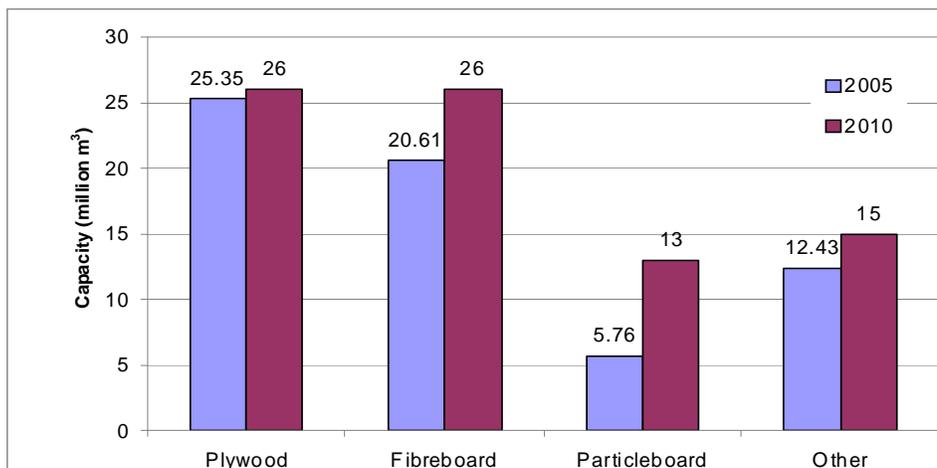


Figure 1 Chinese Wood Panel Production Outlook (Qian, 2007)

Within the plywood sector, Chinese managers are shifting their focus away from capacity expansion to include more product varieties and grades, such as film-faced plywood, concrete forms, container deck flooring, substrate for engineered flooring, LVL, fire retardant and other exterior plywood grades. Due to the lack of large diameter timber, thin plywood production has been largely constrained. As a result, thin particleboard is gradually taking share away from thin plywood in furniture manufacturing. Meanwhile, production of thick plywood and engineered wood products is picking up, products which increasingly are used as concrete form and in other structural and interior applications.

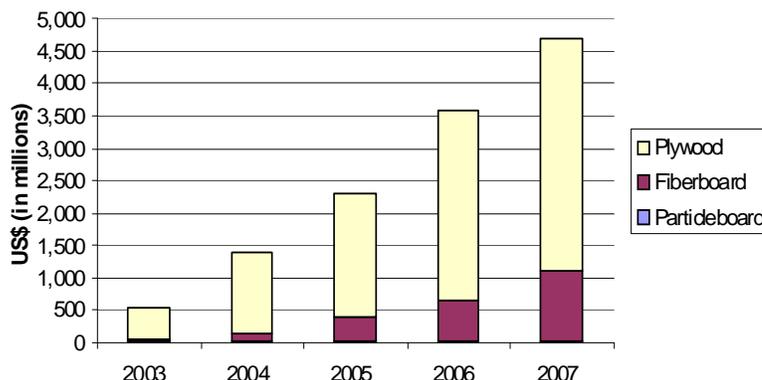


Figure 2. China's Growing Exports of Wood Panels (GTA, 2008)

MDF manufacturers in China are adding capacity for producing thin (3-6 mm) and thick (25mm and above) panels, in addition to traditional MDF panels, such as 12-25 mm panels (mainly for furniture/manufacturing) and 8-12mm panels (mainly for laminated flooring manufacturing). Thin MDF is increasingly used in interior decoration, door and furniture manufacturing, and accounts for 5% of total production. Both thick and thin MDF are increasingly used as packaging materials. With the rapid development of the Chinese woodworking machinery industry, technology is also available for Chinese panel manufacturers to produce specialty products such as fire-retardant MDF and waterproof MDF at competitive costs.

Similarly, the Chinese particleboard industry is moving toward thinner and even density products to be used mainly for furniture production and interior decoration.

Over the past five years, China has been a growing exporter of all three major panel products, while its imports have remained low (Figures 2, 3). Between 2006 and 2007, Chinese plywood exports increased 23% to almost \$3.6 billion, followed by fiberboard exports which increased 71% to reach \$1.1 billion, while particleboard exports increased by 40% to exceed \$35 million. China has steadily reduced its imports of plywood and fiberboard, but still has a strong demand for particleboard, particularly OSB. Imports of particleboard in 2007 hit \$106 million, representing an increase of 4.5% over 2006. Imports of OSB in 2007 were reported to be \$24.6 million. OSB in China is mostly used in interior and furniture applications as a substitute for plywood, blockboard, and MDF, thanks to its greater strength, lighter weight, reduced warping, and lower emissions. As the Chinese economy continues to grow, market opportunities can be expected in interior decoration, furniture, flooring, and door manufacturing industries. The domestic Chinese OSB industry is growing slowly, largely constrained by the lack of an

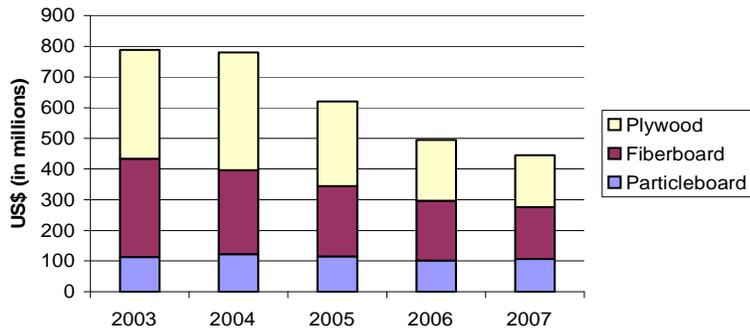


Figure 3. China's Declining Imports of Wood Panels (GTA, 2008)

abundant supply of low-cost timber with competition from the fast-growing paper, plywood and MDF industries. The lack of large diameter timber has also constrained production of OSB panels.

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(Footnote)

¹ The emissions regulations will be enforced in two phases. Phase I will occur on January 1, 2009. Phase II for particleboard and (thick) MDF will occur on January 1, 2011; Phase II requirements for thin MDF will occur on January 1, 2012.

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