

AF&PA-Japan Office Sick House-Formaldehyde Situation Bulletin (Feb. 10, 2003)

With new Sick House regulations to go into effect on July 1, 2003 we have prepared this Situation Bulletin to provide an overview of the issue at hand, with as much verifiable information as possible. It is important to note that there are still many unknowns and specifics that have not been addressed to date. Complicating the issue is the web of jurisdiction by the various ministries and the staggered, seemingly uncoordinated timelines. For example, the Ministry of Land, Infrastructure, & Transportation (MLIT) is responsible for overseeing the enforcement of the Building Standards Law (BSL), yet certain products, such as plywood, oriented strand board (OSB), and flooring fall under the jurisdiction of the Ministry of Agriculture, Forestry, and Fisheries (MAFF) because they are classified as Japan Agricultural Standards (JAS) products. The JAS standards on formaldehyde emissions, per the Timeline below, are to be revised on March 20. It seems that “mechanisms” are in place in the regulations that anticipate problems and questions and we will be working closely with the various ministries to provide as much information and direction as possible. When the BSL Manual for Measures Against Sick-House, due to be published in April, is released we would anticipate that a lot pertaining to this issue might become clearer.

BUILDING MATERIAL CATEGORIES AFFECTED

Notification #1113, the new Sick House regulations, lists 15 categories of building materials that relate to formaldehyde emissions. The Notification was published in the Official Gazette on December 26, 2002. The regulations require that a formaldehyde label be applied if the product is deemed to fall under the new regulations designation. The three categories specifically of interest to the wood industry are designated in **bold face**:

- (1) **Plywood**
- (2) **Flooring**
- (3) **Structural panel**
- (4) MDF
- (5) Particle Board
- (6) Overlaid panel-like products (excluding plywood, flooring, structural panel, MDF, and particle board)
- (7) Urea resin board
- (8) Wallpaper
- (9) Adhesives
- (10) Heat retention materials
- (11) Buffers
- (12) Insulations
- (13) Paints
- (14) Finishing paints
- (15) Adhesives used during the construction.

These 15 categories are affected when applicable to interior finishing materials of habitable rooms. This regulation does **not** apply to structural (linear) members such as posts and beams. Nor does it apply to veneer-overlaid glulam posts. It does not apply to plywood and oriented strand lumber (OSB) used as web-stock for I-joists. The regulations, too, are not applicable to unfinished casings and moldings. The regulations do not apply to railings and banisters, but it **DOES** apply to stair treads. If glue laminated lumber or laminated veneer lumber (lvl) is used as a substrate of the overlaid product in a panel type application (see Item #6 in the above list) the material may require JAS certification or Ministerial Approval. Also, any product that is in a “panel-like” form, for a wall, floor, ceiling, etc., will most likely be affected by this regulation. Exterior sheathing, for example, without an air barrier, is considered as an interior finishing material and, as such, is applicable under the regulation.

Each product category does require separate certification according to the JAS standard, the Japan Industrial Standard (JIS), and Ministerial Approval.

Formaldehyde Emission Evaluating Organizations

For individual products, MLIT has just announced a draft of inspection methods for building materials as relates to formaldehyde emissions. This draft includes a TENTATIVE list of 12 organizations that are capable of evaluating formaldehyde emissions (draft dated January 23, posted on MLIT web-site January 24):

- (1) Hokkaido Northern Building Research Institute
- (2) Japan Testing Center of Construction Materials
- (3) Food Analysis Center
- (4) Building Center of Japan
- (5) Japan Plywood Inspection Corporation (JPIC)**
- (6) Japan Housing and Wood Technology Center
- (7) Japan Paints Inspection Corporation
- (8) Japan Textile Inspection Corporation
- (9) Center for Better Living
- (10) Tokai Technical Center
- (11) Chemical Compound Evaluation Research Institute
- (12) General Building Research Corporation

PROPOSED TIMELINE

Timeline (proposed) for enforcement of sick house related regulations:

- 1) Building Standard Law
 - Proclamation of amendment of BSL
 - July 12, 2002

- Proclamation of amendment of BSL Enforcement Order (EO) and establishment of Notifications
December 26, 2002
- Announcement of details of Ministerial Approval
Late January 2003 (Delayed as of 2-5-03)
- Amendment of BSL Enforcement Regulation (ER) concerning application forms for a confirmation certificate
Early February 2003
- Amendment of Notifications incorporating JAS and JIS revisions
Late March 2003
- Publication of Manual for Measures against Sick-House
April 2003
- Seminars throughout Japan under the provisions of the Kenchikushi Law
From early May through the middle of June 2003
- **Enforcement of measures against Sick-House
July 1, 2003**

2) JAS Standards Revision

- JAS standards revision concerning formaldehyde emission
March 20, 2003
- Enforcement of the revisions
April 2003

3) JIS Standards Establishment and Revision

- Establishment of small chamber testing method
January 20, 2003
- Announcement and enforcement of Amendments of JIS standards that will include non-formaldehyde glue and paint
March 20, 2003

4) Housing Quality Assurance Act (HQAA)

- Revision of Notifications concerning indoor air quality
Middle of April 2003

5) Ministerial Approval System

- Commencement of receipt of applications of performance tests by Designated Evaluation Bodies
Early February 2003
- Commencement of receipt of application for Ministerial Approval
Early February 2003
- Commencement of receipt application of Type Approval by Designated Approval Bodies
Late February 2003

Under the current JAS standards, it is not mandatory to apply a Formaldehyde emissions label stamp to a JAS product for structural plywood and OSB. As such, there is non-F marked product in inventory, whether in the United States or Japan, that complies with the current JAS standard but will be out of compliance under the new (MLIT) Sick House regulations (effective July 1) and JAS Standard revision (projected for March 20). Again, if the product is deemed to qualify as JAS, but simply hasn't needed to, will be required to receive JAS certification as of March 20. Unmarked non-Formaldehyde JAS product inventory is considered as Class I but can be re-graded via the "Category 1 grading" system under JAS. "Category 1" is a product certification that must be conducted by a Registered Grading Organization (RGO). This means that there is a mechanism in place to allow for this inventory to be used, however, at this time there are no U.S. organizations that are Registered Foreign Grading Organizations (RFGO) certified. The only RGO at this time is JPIC (designated in bold, above).

Fc0 MARKED product, on the other hand, is a different matter. Current Fc1 and Fc0 marked product will be considered as Class II and Class III product respectively. In other words, no re-grading is required. MLIT does allow for a method to upgrade, as noted in the Inspection Method draft (See table below). In addition, U.S. industry is currently seeking permission for U.S. Registered Foreign Certifying Organizations (RFCO) to be permitted to issue a certificate of test data permitting currently Fc0 "marked" product to be upgraded to F**** (F-4 star). F-4 star product can be used without restrictions under MLIT Sick House regulations.

Upgrading Formaldehyde Classification Table

Using the table below, applicable only for plywood, structural panels (OSB), and flooring, this means that if product is considered as MLIT Class I product and is NOT upgraded, the product may not be used for construction in Japan. To allow its use it must be re-graded via the JAS Category I system. If the product is re-graded by an RGO (again, to date there

is no wood RFGO) to meet the new F** (F-2 Star) identification, the product can be used as long as it meets the area restrictions specified in Article 20-5 of BSL EO.

Notification Number	MLIT's Class	New JAS Identification	Equivalent to current JAS or JIS	Re-grading or upgrading	Sick-house regulation
1113	Class I		Fc2, E2, unmarked	Category I grading by RGO or RFGO	Prohibited in use
1114	Class II	F**	Fc1, E1	Category I grading by RGO or RFGO	Tighter area restriction
1115	Class III	F****	Fc0, E0	Category I grading by RGO or RFGO Up-grade to F***** with Certificate and test data by organization that is capable to evaluate formaldehyde emission	Area restriction
N/A	Other than Class I, II, III	F*****	Equivalent to (F0.3)	(New JAS F***** marked products) Category I grading by RGO	No restriction

Note: Non-F marked JAS inventory must be certified Class II or above according to JAS standards as pertains to RGO or RFGO.

Previously AF&PA had solicited and received confirmation from U.S. RFCO's that they would be able to supply F-4 star JAS product when the new JAS standard is applied.

AF&PA Japan will continue to monitor the issue and, when appropriate, issue further updated bulletins.