401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials and intermediate and finished materials; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water" (40 CFR 122.26(b)(14)). The most common industrial activities at furniture and fixture manufacturing facilities include material handling sites and raw material storage areas.

Significant materials include, "* * * but [are] not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products;

materials such as metallic products;

* * * hazardous substances designated under Section 101(14) of CERCLA; any chemical facilities required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharges' (40 CFR 122.26(b)(12)). Significant materials commonly found at furniture and fixture manufacturing facilities include: wood; saw dust; metals; petroleumbased products; solvents; detergents; and waste materials.

Manufacturers of furniture and fixtures are separated by the primary raw material (i.e., wood and metal). The primary raw materials, industrial processes, waste and by-products, and final products differ for the production of wood furniture and metal furniture. Within each subsector the number of industrial activities and corresponding significant materials and waste products may also vary. Presented below are brief descriptions of the industrial activities and significant materials associated with the manufacturing of wood and metal furniture and fixtures. Due to similarities in the production of furniture and fixtures within subsectors, industrial activities and significant materials are fairly uniform across this sector. Unique practices are noted.

a. Manufacturing of Wood Furniture and Fixtures. The process of manufacturing wood furniture begins with the delivery and storage of wood. There are three different raw wood materials; lumber, veneer, and particle board. Since the manufacturing processes are not typically exposed to storm water for this industry, some of the "industrial activities" described below may not be susceptible to storm water exposure. Significant materials and materials management practices do refer to those materials exposed to storm

water, and to the subsequent management practices used to control storm water. Variations on exposure to industrial activities and significant materials are site-specific.

Industrial Activities. Once delivered, raw lumber is allowed to air dry up to 1 year. After the lumber is sufficiently air dried it is then transported to a dry kiln for further drying. The lumber is kiln dried anywhere from 7 to 150 days. Once the lumber has been dried to a desired moisture content, the dried lumber is taken to the processing area. The remaining furniture manufacturing processes are all completed indoors. Manufacturers may also receive lumber that is already dried. Therefore, the manufacturers may not need to air or kiln dry the wood and proceed directly into the processing stage.

The dried lumber is run through planers, to create a smooth, preliminary working surface, and then cut to specified dimensions depending on the end use. The sized lumber is then taken through sanding and machining operations. Sanding produces a smooth, fine working surface. Machining can include boring, routing, lathe operations, mitre cutting, and finish cuts. From this point, each piece of wood is dedicated to a specific product.

Veneer is another raw material used in the production of furniture. In this process logs are placed in a steam vat to increase the moisture content of a log. The logs are turned on a lathe to peel off the veneer. The resulting veneer sheets are layered into stacks or "hacks." Moisture is removed from the hacks by kiln drying. After a desired moisture content has been achieved the hacks are disassembled. Veneer is frequently hot or cold pressed onto particle board or solid wood by utilizing adhesives.

Particle board is the third raw material incorporated into the manufacturing of wood furniture. The board is received, cut to size, and banded on all four edges with solid wood. The banding is accomplished in continuous, steam heated units utilizing adhesives. The panels are allowed to cool and then they are sanded. Particle board is frequently coated with veneer.

The products from the three raw materials may be combined during the machining and sanding step or during the final assembly of a furniture piece. The machining and sanding step may include: initial sizing of particle board, veneer, and lumber; laminating operations; and surface printing. Once all the pieces of a particular furniture item are manufactured and sized, assembly can begin. This process

generally involves an assembly line routing with many different individuals and machines working together to build the unit.

The final step in creating an unupholstered piece of furniture involves surface finishing. This process may involve many separate coats of stains, lacquers, sealers, and finishes to a single unit. This is the step where a uniform wood color and texture are given to each piece of furniture or furniture grouping.

Facilities that manufacture upholstered furniture may have all of the previously mentioned activities, or may purchase dried or sized materials from a manufacturer. Upholstered furniture manufacturers will transport, handle, store, and process natural and synthetic fibers used for the upholstery. After the wood component of an upholstered piece of furniture is assembled, the upholstery materials are cut, sized, stretched, and then attached to the frame. After the final inspection of a furniture piece, the unit is packaged and either stored temporarily onsite or immediately shipped to an offsite location.

(2) Significant Materials. The significant materials identified, in part 1 of the group applications, as exposed to storm water at wood furniture and fixture manufacturing facilities include: raw wood; sawdust; coal; kiln ash; solvent-based finishing materials and waste products; used rags; raw glue and waste materials; and petroleum-based products. While most of the raw wood material is stored outside, more valuable wood products (e.g., sheets of veneer, mahogany, etc.) and some composite wood products (e.g., particle board) may be stored inside or under cover.

b. Manufacturing of Metal Furniture and Fixtures. Many furniture and fixture manufacturing facilities build their furniture with metal as the primary raw material. However, some manufacturers combine wood and upholstered materials with a metal frame. Metal furniture manufacturing facilities may purchase wood pieces ready for assembly or they may have all the industrial activities of wood manufacturing facilities in addition to the metal manufacturing facilities. The industrial activities at metal furniture manufacturing facilities will be sitespecific and depend upon the level of work necessary to shape and treat the delivered metal into a furniture piece.

(1) Industrial Activities. Facilities that manufacture metal household furniture conduct operations that include: machining and assembly, finishing, and temporary storage of finished products within an enclosed building. Cold roll steel is initially received and