

Appendix G

Descriptions of Major Industrial Groups and Selected Industries

This appendix contains descriptions of industrial groups and selected industries taken from the *Standard Industrial Classification Manual, 1987* (SIC).⁷⁵ This appendix includes descriptions of the 30 groups that comprise the strata of the Manufacturing Energy Consumption Survey. These are the 20 major industrial groups (two-digit SIC) and the 10 major energy-consuming industries (four-digit SIC). The Standard Industrial Classification system is described in Appendix B.

SIC 20—Food and Kindred Products: This major group includes establishments manufacturing foods and beverages for human consumption and certain related products such as manufactured ice, chewing gum, vegetable and animal fats and oils, and prepared feeds for animals and fowls.

SIC 2011—Meat Packing Plants: Establishments primarily engaged in the slaughtering, for their own account or on a contract basis for the trade, of cattle, hogs, sheep, lambs, and calves for meat to be sold or to be used on the same premises in canning, cooking, curing, and freezing, and in making sausage, lard, and other products.

SIC 2033—Canned Fruits and Vegetables: Establishments primarily engaged in canning fruits, vegetables, and fruit and vegetable juices; and in manufacturing catsup and similar tomato sauces or natural and imitation preserves, jams, and jellies.

SIC 2037—Frozen Fruits and Vegetables: Establishments primarily engaged in freezing fruits, fruit juices, and vegetables. These establishments also produce important byproducts such as fresh or dried citrus pulp.

SIC 2046—Wet Corn Milling: Establishments primarily engaged in milling corn or sorghum grain (milo) by the wet process, and producing starch, syrup, oil, sugar, and byproducts such as gluten feed and meal. Also included in this industry are establishments primarily engaged in manufacturing starch from other vegetable sources (e.g., potatoes, wheat).

SIC 2051—Bread, Cake and Related Products: Establishments primarily engaged in manufacturing fresh or frozen bread and bread-type rolls and fresh cakes, pies, pastries and other similar "perishable" bakery products.

SIC 2062—Cane Sugar Refining: Establishments primarily engaged in refining purchased raw cane sugar and sugar syrup.

SIC 2063—Beet Sugar: Establishments primarily engaged in manufacturing sugar from sugar beets.

SIC 2075—Soybean Oil Mills: Establishments primarily engaged in manufacturing soybean oil, cake, and meal, and soybean protein isolates and concentrates or in processing purchased soybean oil other than into edible cooking oils.

SIC 21—Tobacco Products: This major group includes establishments engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, snuff, and reconstituted tobacco and in stemming and redrying tobacco.

SIC 22—Textile Mill Products: This major group includes establishments engaged in performing any of the following operations: (1) preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine, and cordage; (2) manufacturing broadwoven fabrics, narrow woven fabrics, knit fabrics, and carpets and rugs from yarn; (3) dyeing and finishing fiber, yarn, fabrics, and knit apparel; (4) coating, waterproofing, or otherwise treating fabrics; (5) the integrated manufacture of knit apparel and other finished articles from yarn; and (6) the manufacture of felt goods, lace goods, nonwoven fabrics, and miscellaneous textiles.

⁷⁵Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual, 1987*, pp. 67-263.

SIC 23—Apparel and Other Textile Products: This major group, known as the cutting-up and needle trades, includes establishments producing clothing and fabricating products by cutting and sewing purchased woven or knit textile fabrics and related materials, such as leather, rubberized fabrics, plastics, and furs.

SIC 24—Lumber and Wood Products: This major group includes establishments engaged in cutting timber and pulpwood; merchant sawmills, lath mills, shingle mills, cooperage stock mills, planing mills, and plywood and veneer mills engaged in producing lumber and wood basic materials; and establishments engaged in manufacturing finished articles made entirely or mainly of wood or related materials.

SIC 25—Furniture and Fixtures: This major group includes establishments engaged in manufacturing household, office, public building, and restaurant furniture; and office and store fixtures.

SIC 26—Paper and Allied Products: This major group includes establishments primarily engaged in the manufacture of pulps from wood and other cellulose fibers, and from rags; the manufacture of paper and paper board; and the manufacture of paper and paperboard into converted products, such as paper coated off the paper machine, paper bags, paper boxes, and envelopes.

SIC 2611—Pulp Mills: Establishments primarily engaged in manufacturing pulp from wood or from other materials, such as rags, linters, wastepaper, and straw.

SIC 2621—Paper Mills: Establishments primarily engaged in manufacturing paper from wood pulp and other fiber pulp, and which may also manufacture converted paper products.

SIC 2631—Paperboard Mills: Establishments primarily engaged in manufacturing paperboard, including paperboard coated on the paperboard machine, from wood pulp and other fiber pulp.

SIC 27—Printing and Publishing: This major group includes establishments engaged in printing by one or more common processes, such as letterpress, lithography (including offset), gravure, or screen; and those establishments which perform services for the printing trade, such as bookbinding and platemaking.

SIC 28—Chemicals and Allied Products: This major group includes establishments producing basic chemicals, and establishments manufacturing products by predominantly chemical processes. Establishments classified in this major group manufacture three general classes of products: (1) basic chemicals, such as acids, alkalies, salts, and organic chemicals; (2) chemical products to be used in further manufacture, such as synthetic fibers, plastics materials, dry colors, and pigments; and (3) finished chemical products to be used for ultimate consumption, such as drugs, cosmetics, and soaps; or to be used as materials or supplies in other industries, such as paints, fertilizers, and explosives.

SIC 2812—Alkalies and Chlorine: Establishments primarily engaged in manufacturing alkalies and chlorine.

SIC 2813—Industrial Gases: Establishments primarily engaged in manufacturing industrial gases (including organic) for sale in compressed, liquid, and solid forms.

SIC 2819—Industrial Inorganic Chemicals, Not Elsewhere Classified: Establishments primarily engaged in manufacturing industrial organic chemicals, excluding alkalies and chlorine, industrial gases, and inorganic pigments.

SIC 2821—Plastics Materials and Resins: Establishments primarily engaged in manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers.

SIC 2822—Synthetic Rubber: Establishments primarily engaged in manufacturing synthetic rubber by polymerization or copolymerization. An elastomer for the purpose of this classification is a rubber-like material capable of vulcanization, such as copolymers of butadiene and styrene, or butadiene and acrylonitrile, polybutadienes, chloroprene rubbers, and isobutylene-isoprene copolymers.

SIC 2823—Cellulosic Manmade Fibers: Establishments primarily engaged in manufacturing cellulosic fibers (including cellulose acetate and regenerated cellulose such as rayon by the viscose or cuprammonium process) in the form of monofilament, yarn, staple, or tow suitable for further manufacturing on spindles, looms, knitting machines, or other textile processing equipment.

SIC 2824—Organic Fibers, Noncellulosic: Establishments primarily engaged in manufacturing manmade organic fibers, except cellulosic (including those of regenerated proteins, and of polymers or copolymers of such components as vinyl chloride, vinylidene chloride, linear esters, vinyl alcohols, acrylonitrile, ethylenes, amides, and related polymeric materials), in the form of monofilament, yarn, staple, or tow suitable for further manufacturing on spindles, looms, knitting machines, or other textile processing equipment.

SIC 2865—Cyclic Crudes and Intermediates: Establishments primarily engaged in manufacturing cyclic organic crudes and intermediates, and organic dyes and pigments. Important products of this industry include: (1) aromatic chemicals, such as benzene, toluene, mixed xylenes naphthalene; (2) synthetic organic dyes; and (3) synthetic organic pigments.

SIC 2869—Industrial Organic Chemicals, Not Elsewhere Classified: Establishments primarily engaged in manufacturing industrial organic chemicals, excluding gum and wood chemicals, and cyclic organic crudes and intermediates, and organic dyes and pigments.

SIC 2873—Nitrogenous Fertilizers: Establishments primarily engaged in manufacturing nitrogenous fertilizer materials or mixed fertilizers from nitrogenous materials produced in the same establishment.

SIC 2874—Phosphatic Fertilizers: Establishments primarily engaged in manufacturing phosphatic fertilizer materials, or mixed fertilizers from phosphatic materials produced in the same establishment.

SIC 29—Petroleum Refining and Related Industries: This major group includes establishments primarily engaged in petroleum refining, manufacturing paving and roofing materials, and compounding lubricating oils and greases from purchased materials.

SIC 2911—Petroleum Refining: Establishments primarily engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, and lubricants, through fractionation or straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking or other processes.

SIC 30—Rubber and Miscellaneous Plastics Products: This major group includes establishments manufacturing products, not elsewhere classified, from plastics, resins, and from natural, synthetic, or reclaimed rubber, gutta percha, balata, or gutta siak.

SIC 3011—Tires and Inner Tubes: Establishments primarily engaged in manufacturing pneumatic casings, inner tubes, and solid and cushion tires for all types of vehicles, airplanes, farm equipment, and children's vehicles; tiring; camelback; and tire repair and retreading materials.

SIC 308—Miscellaneous Plastics Products Not Elsewhere Classified: Establishments primarily engaged in manufacturing (1) unsupported plastics film and sheet from purchased resins or from resins produced in the same plant; (2) unsupported plastics profiles, rods, tubes, and other shapes; (3) laminated plastics plate, sheet, profiles, rods, and tubes; (4) plastics pipe; (5) Plastics bottles; (6) custom compounding of purchased plastics resins; (7) plastics plumbing fixtures; and (8) plastics products not elsewhere classified.

SIC 31—Leather and Leather Products: This major group includes establishments engaged in tanning, currying, and finishing hides and skins, leather converters, and establishments manufacturing finished leather and artificial leather products and some similar products made of other materials.

SIC 32—Stone, Clay, Glass, and Concrete Products: This major group includes establishments manufacturing flat glass and other glass products, cement, structural clay products, pottery, concrete and gypsum products, cut stone, abrasive and asbestos products, and other products from materials taken principally from the earth in the form of stone, clay, and sand.

SIC 3211—Flat Glass: Establishments primarily engaged in manufacturing flat glass. This industry also produces laminated glass, but establishments primarily engaged in manufacturing laminated glass from purchased flat glass are not included.

SIC 3221—Glass Containers: Establishments primarily engaged in manufacturing glass containers for commercial packing and bottling, and for home canning.

SIC 3229—Pressed and Blown Glass and Glassware, Not Elsewhere Classified: Establishments primarily engaged in manufacturing glass and glassware, not elsewhere classified, pressed, blown, or shaped from glass produced in the same establishment. Establishments primarily engaged in manufacturing textile glass fibers are also included in this industry. Establishments primarily engaged in the production of pressed lenses for vehicular lighting, beacons, and lanterns are also included in this industry.

SIC 3241—Cement, Hydraulic: Establishments primarily engaged in manufacturing hydraulic cement, including portland, natural, masonry, and pozzolana cements.

SIC 3274—Lime: Establishments primarily engaged in manufacturing quicklime, hydrated lime, and "dead-burned" dolomite from limestone, dolomite shells, or other substances.

SIC 3296—Mineral Wool: Establishments primarily engaged in manufacturing mineral wool and mineral wool insulation products made of such siliceous materials as rock, slag and glass, or combinations thereof.

SIC 33—Primary Metal Industries: This major group includes establishments engaged in smelting and refining ferrous and nonferrous metals from ore, pig, or scrap; in rolling, drawing, and alloying metals; in manufacturing castings and other basic metal products; and in manufacturing nails, spikes, and insulated wire and cable.

SIC 3312—Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills: Establishments primarily engaged in manufacturing hot metal, pig iron, and silvery pig iron from iron ore and iron and steel scrap; converting pig iron, scrap iron, and scrap steel into steel; and in hot-rolling iron and steel into basic shapes, such as plates, sheets, strips, rods, bars, and tubing.

SIC 3313—Electrometallurgical Products: Establishments primarily engaged in manufacturing ferrous and nonferrous metal additive alloys by electrometallurgical or metallothermic processes, including high percentage ferroalloys and high percentage nonferrous additive alloys.

SIC 3321—Gray and Ductile Iron Foundries: Establishments primarily engaged in manufacturing gray and ductile iron castings, including cast iron pressure and soil pipes and fittings.

SIC 3331—Primary Copper: Establishments primarily engaged in smelting copper from the ore, and in refining copper by electrolytic or other processes.

SIC 3334—Primary Production of Aluminum: Establishments primarily engaged in producing aluminum from alumina and in refining aluminum by any process.

SIC 3339—Primary Nonferrous Metals, Not Elsewhere Classified: Establishments primarily engaged in smelting and refining nonferrous metals, except copper and aluminum.

SIC 3353—Aluminum Sheet, Plate, and Foil: Establishments primarily engaged in flat rolling aluminum and aluminum-base alloy basic shapes, such as sheet, plate, an foil, including establishments producing welded tube.

SIC 34—Fabricated Metal Products: This major group includes establishments engaged in fabricating ferrous and nonferrous metal products such as metal cans, tinware, handtools, cutlery, general hardware, nonelectric heating apparatus, fabricated structural metal products, metal forgings, metal stampings, ordnance (except vehicles and guided missiles), and a variety of metal and wire products, not elsewhere classified.

SIC 35—Industrial Machinery and Equipment: This major group includes establishments engaged in manufacturing industrial and commercial machinery and equipment and computers.

SIC 357—Computer and Office Equipment: Establishments primarily engaged in manufacturing electronic computers; computer storage devices; computer terminals; point-of-sale devices; funds transfer devices and other calculating and accounting machines; and office machines and devices not elsewhere classified, including typewriters and word processing equipment.

SIC 36—Electronic and Other Electric Equipment: This major group includes establishments engaged in manufacturing machinery, apparatus, and supplies for the generation, storage, transmission, transformation, and utilization of electrical energy.

SIC 37—Transportation Equipment: This major group includes establishments engaged in manufacturing equipment for transportation of passengers and cargo by land, air, and water.

SIC 3711—Motor Vehicles and Car Bodies: Establishments primarily engaged in manufacturing or assembling complete passenger automobiles, trucks, commercial cars and buses, and special purpose motor vehicles which are for highway use. This industry also includes establishments primarily engaged in manufacturing chassis and passenger car bodies.

SIC 3714—Motor Vehicle Parts and Accessories: Establishments primarily engaged in manufacturing motor vehicle parts and accessories, but not engaged in manufacturing complete motor vehicles or passenger car bodies.

SIC 38—Instruments and Related Products: This major group includes establishments engaged in manufacturing instruments (including professional and scientific) for measuring, testing, analyzing, and controlling, and their associated sensors and accessories; optical instruments and lenses; surveying and drafting instruments; hydrological, hydrographic, meteorological, and geophysical equipment; search, detection, navigation, and guidance systems and equipment; surgical, medical, and dental instruments, equipment and supplies; ophthalmic goods; photographic equipment and supplies; and watches and clocks.

SIC 39—Miscellaneous Manufacturing Industries: This major group includes establishments primarily engaged in manufacturing products not classified in any other major group.

