

APPENDIX E: INDUSTRIES AND ENVIRONMENTAL CONCERNS

The following listing is based on the industrial activities listed in the Malaysia Standard Industrial Classification (MSIC) 2008, as well as the industries and activities that are typically found in Malaysia. These table represents typical and general description of the industry and activity, not detailing its actual operation, components, sections or sectors.

Within the table, it presents an overview of the likely environmental concerns that may arise in lieu of the industrial activity and its sub-activities, solely for the purpose of **general understanding and guide**.

It is recommended that further details on the implementation and operation comprising the specific details of its components, sections or sectors of these activities to be understood and undertaken to determine the actual environmental concerns and its magnitude. The ticks (✓) shown here does not represent its magnitude, only as an identification of its concern.

Note:

n.e.c. not elsewhere classified

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
1. Mining and Quarrying								
Mining of coal and lignite								
Mining of hard coal (coal, iron ore, bauxite, gold, etc.)	Mining of hard coal: underground or surface mining.		✓	✓		✓		✓
	On-site facilities include for cleaning, sizing, grading, pulverizing, compressing etc.		✓	✓		✓	✓	✓
Mining of lignite	Mining of lignite (brown coal): underground or surface		✓	✓		✓		✓
	On-site facilities for cleaning, sizing, grading, etc		✓	✓		✓	✓	✓
2. Extraction of crude petroleum and natural gas								
Extraction of crude petroleum	Offshore extraction of crude petroleum oils, bituminous or oil shale and tar sand	✓		✓		✓		✓
	Onshore extraction of crude petroleum oils, bituminous or oils shale and tar sand	✓	✓	✓		✓	✓	✓
	On-site processes to obtain crude oils	✓	✓	✓		✓	✓	✓
Extraction of natural gas	Offshore production of crude gaseous hydrocarbon	✓	✓	✓		✓	✓	✓
	Onshore production of crude gaseous hydrocarbon	✓	✓	✓		✓		✓
3. Mining of metal ores								
Mining of iron ores	Mining of ores valued chiefly for iron content		✓	✓		✓	✓	✓
Mining of non-ferrous metal ores other than uranium & thorium	Mining and preparation of ores valued chiefly for non-ferrous metal content: <ul style="list-style-type: none"> Aluminium (bauxite), copper, lead, zinc, tin, manganese, chrome, nickel, cobalt, molybdenum, tantalum, vanadium etc. Precious metals: gold, silver, platinum 		✓	✓		✓	✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
4. Other mining and quarrying								
Quarrying of stone, sand and clay (include gypsum and anhydrite, chalk and uncalcined dolomite)	Quarrying, rough trimming and sawing of monumental and building stone such as marble, granite, sandstone, etc.		✓	✓		✓		✓
	Extraction and dredging sand and gravel		✓	✓		✓		✓
	Quarrying of sand		✓			✓		✓
	Mining of clays, refractory clays and kaolin		✓	✓		✓		✓
Mining & quarrying n.e.c.			✓	✓		✓		✓
5. Manufacture of food products								
Processing & preserving of meat	Operation of slaughterhouses		✓		✓		✓	✓
	Production of hides and skins			✓	✓	✓	✓	✓
	Processing of animal offal				✓	✓	✓	✓
	Rendering of lard and other edible fats of animal origin				✓		✓	✓
	Production of pulled wool				✓		✓	✓
	Production of feathers and down				✓			✓
Processing & preserving of fish, crustaceans and molluscs	Preparation, preservation and production of fish, crustaceans and molluscs				✓		✓	✓
	Production of fishmeal for human consumption				✓	✓	✓	✓
	Production of meals and solubles from fish and other aquatic animals unfit for human consumption				✓	✓	✓	✓
Processing & preserving of fruit and vegetables	Manufacture of food consisting chiefly of fruit or vegetables, except ready-made dishes in frozen or canned form				✓	✓	✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Manufacture of vegetable and animal oils and fats	Manufacture, refining, processing of: <ul style="list-style-type: none"> • Crude vegetable oils • Non-defatted flour or meal of oilseeds, oil nuts Manufacture of margarine, melanges, similar spreads and compound cooking fats	✓		✓	✓	✓	✓	✓
Manufacture of dairy products	Example: <ul style="list-style-type: none"> • Milk products and milk-based drinks, dried or concentrated milk • Cream from fresh liquid milk, pasteurized, sterilized, homogenized • Milk or cream in solid form • Butter, yoghurt, cheese, curd, whey, casein, lactose • Ice cream and other edible ice 	✓		✓		✓	✓	✓
Manufacturing of palm oil products	Example: <ul style="list-style-type: none"> • Kernel oil • Cosmetics • Consumer products, etc. 	✓		✓	✓	✓	✓	✓
Manufacture of grain mill products, starches and starch products								
Manufacture of grain mill products	<ul style="list-style-type: none"> • Grain milling 			✓	✓	✓		✓
	<ul style="list-style-type: none"> • Rice milling • Vegetable milling 			✓			✓	✓
	<ul style="list-style-type: none"> • Manufacture of cereal breakfast foods • Manufacture of flour mixes and prepared blended flour and dough for bread, cakes, biscuits or pancakes 			✓	✓	✓	✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Manufacture of starches and starch products	Manufacture of: <ul style="list-style-type: none"> • Starches from rice, potatoes, maize, etc. • Glucose, glucose syrup, maltose, inulin, gluten etc. • Tapioca and tapioca substitute • Corn oil 				✓	✓	✓	✓
Manufacture of other food products	Factory scaled production of bakery products, sugar and confectionery, macaroni, noodles and similar products, prepared meals and dishes, coffee, tea and spices				✓		✓	✓
Manufacture of bakery products	Large scale production of bakery products, bread and rolls, fresh pastry, cakes, pies, tarts, rusks, biscuits, other “dry” bakery products, preserved pastry goods and cakes, snack products, tortillas, and frozen bakery products			✓	✓	✓		✓
	Medium scale of bakery products, bread and rolls, fresh pastry, cakes, pies, tarts, rusks, biscuits, other “dry” bakery products, preserved pastry goods and cakes, snack products, tortillas, and frozen bakery products					✓		✓
Manufacture of sugar	Manufacture or refining of sugar and sugar substitutes		✓		✓	✓	✓	✓
Manufacture of cocoa and chocolate products	Manufacture of cocoa and chocolate products		✓			✓	✓	✓
Manufacture of pastas	Manufacture of pastas							✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Manufacture of prepared meals and dishes	Manufacture of: <ul style="list-style-type: none"> • Meat or poultry dishes • Fish dishes, including fish and chips • Prepared dishes of vegetables • Canned stews and vacuum-prepared meals • Other prepared meals 			✓	✓	✓	✓	
Manufacture of other food products n.e.c.	<ul style="list-style-type: none"> • Coffee products • Tea products • Manufacture of soups and broths • Manufacture of special foods, such as infant, formula • Manufacture of spices, sauces and condiments • Manufacture of artificial honey and caramel 		✓	✓	✓		✓	✓
	<ul style="list-style-type: none"> • Manufacture of vinegar 				✓			✓
Manufacture of prepared animal feeds	Manufacture of: <ul style="list-style-type: none"> • Prepared feeds for pets • Prepared feeds for farm animals • Unmixed (single) feeds for farm animals 				✓		✓	✓
	Manufacture of fishmeal				✓			
6. Manufacture of beverages								
Distilling, rectifying and blending of spirits	Manufacture of distilled, potable, alcoholic beverages		✓	✓	✓		✓	✓
Manufacture of wines	Manufacture/blending of wine, sparkling wine, wine from concentrated grape, fermented but not distilled alcoholic beverages				✓		✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Manufacture of malt liquors and malt	Manufacture of malt liquors				✓		✓	✓
Manufacture of soft drinks; production of mineral waters and etc.	Manufacture of non-alcoholic beverages Manufacture of soft drinks, non-alcoholic flavoured and/or sweetened waters		✓	✓	✓		✓	✓
7. Manufacture of tobacco products								
Manufacture of tobacco products	Manufacture of tobacco products and products of tobacco substitutes		✓	✓	✓		✓	✓
8. Manufacture of textiles								
Spinning, weaving and finishing of textiles								
Preparation and spinning of textile fibres	Preparatory operations on textile fibres: <ul style="list-style-type: none"> • Reeling and washing of silk • Degreasing and carbonizing of wool and dyeing of wool fleece • Carding and combing • Spinning and manufacture of yarn or thread 	✓	✓	✓	✓			✓
Weaving of textiles	<ul style="list-style-type: none"> • Manufacture of broad woven cotton-type, woollen-type, worsted-type, or silk-type fabrics 	✓	✓	✓	✓			✓
Finishing of textiles	<ul style="list-style-type: none"> • Bleaching and dyeing • Dressing, drying, steaming, shrinking, mending, Sanforizing, mercerizing of textiles and textile articles 	✓	✓	✓	✓			✓
Manufacture of other textiles								
Manufacture of made-up textile articles, except apparel	<ul style="list-style-type: none"> • Manufacture of made-up articles of any material • Fabrics & blankets • Manufacture of made-up furnishing articles 	✓	✓	✓			✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Manufacture of carpets and rugs	Manufacture of textile floor covering, carpets, rugs and mats, tiles		✓	✓				✓
Manufacture of cordage, rope, twine and netting	<ul style="list-style-type: none"> • Manufacture of twine, cordage, rope and cables of textile fibres or strip or the likes • Manufacture of products of rope or netting 	✓	✓					✓
Manufacture of other textiles not elsewhere classified (n.e.c.)	<ul style="list-style-type: none"> • Manufacture of narrow woven fabrics • Manufacture of labels, badges etc. • Manufacture of ornamental trimmings • Manufacture of felt • Manufacture of tulle and other net fabrics • Manufacture of tyre cord fabric of high-tenacity manmade yarn • Manufacture of other treated or coated fabrics • Manufacture of diverse textile articles • tubular gas mantle fabric, hose piping, transmission or conveyor belts or belting 	✓	✓	✓			✓	✓
9. Manufacture of wearing apparel								
Manufacture of wearing apparel	Manufacture of wearing apparel from leather or composition leather	✓	✓	✓	✓		✓	✓
Manufacture of articles of fur	Manufacture of articles made of fur skins to produce wearing apparel and clothing accessories, assemblies of fur skins and diverse articles of fur skins	✓	✓	✓	✓		✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
10. Manufacture of leather and related products								
Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness; dressing and dyeing of fur								
Tanning and dressing of leather; dressing and dyeing of fur	<ul style="list-style-type: none"> Tanning, dyeing and dressing of hides and skins Manufacture of composition leather Scraping, shearing, plucking, currying, tanning, bleaching and dyeing of fur skins 	✓	✓	✓	✓		✓	✓
Manufacture of luggage, handbags	<ul style="list-style-type: none"> Manufacture of luggage, handbags and the like Manufacture of saddlery and harness Manufacture of non-metallic watch bands Manufacture of diverse articles of leather 		✓		✓			✓
Manufacture of footwear	Manufacture of footwear							
11. Manufacture of wood and cork, except furniture; manufacture of articles of straw and plaiting materials								
Sawmilling and planning of wood	<ul style="list-style-type: none"> Sawing, planning, machining drying and impregnation of wood Slicing, peeling or chipping logs Manufacture of unassembled wooden flooring Manufacture of wood wool, wood flour, chips 	✓	✓	✓		✓		✓
Manufacture of products of wood, cork, straw and plaiting materials								
Manufacture of veneer sheets and wood-based panels	<ul style="list-style-type: none"> Manufacture of veneer sheets Manufacture of plywood, veneer panels and similar laminated wood boards and sheets Manufacture of particle board and fibreboard Manufacture of densified wood 	✓	✓	✓	✓	✓		✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Manufacture of builders' carpentry and joinery	<ul style="list-style-type: none"> • Manufacture of wooden goods intended to be used primarily in the construction industry • Manufacture of prefabricated buildings • Manufacture of mobile homes • Manufacture of wood partitions 		✓			✓		✓
Manufacture of wooden containers	<ul style="list-style-type: none"> • Manufacture of packing cases, boxes, crates, drums and similar packing of wood • Manufacture of pallets, box pallets and other load boards of wood 		✓					✓
Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials	<ul style="list-style-type: none"> • Manufacture of various wood consumable products, household products, etc. • Manufacture of articles of natural or agglomerated cork, including floor coverings • Manufacture of basket-ware and wickerwork • Manufacture of fire logs 		✓					✓
12. Manufacture of paper and paper products								
Manufacture of paper and paper products								
Manufacture of pulp, paper and paperboard	Manufacture of bleached, semi-bleached or unbleached paper pulp Activities of pulping	✓	✓	✓	✓	✓	✓	✓
Manufacture of corrugated paper and paperboard and of containers of paper and paperboard	Examples: <ul style="list-style-type: none"> • Corrugated paper and paperboard • Folding paperboard containers • Containers of solid board • Office box files and similar articles 	✓	✓	✓			✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Manufacture of other articles of paper and paperboard	Manufacture of semi-produced paper raw materials into: <ul style="list-style-type: none"> • hygiene paper • Textile wadding and articles of wadding • Printing and writing paper • Gummed or adhesive paper • Envelopes and letter-cards • Registers, books, binders, album • Boxes, pouches, wallets and writing compendiums • Wallpaper • Filter paper and paperboard • Paper and paperboard bobbins, spools, cops etc. • Egg trays and other moulded pulp packaging 	✓	✓	✓	✓		✓	✓
13. Printing and reproduction of recorded media								
Printing and service activities related to printing								
Printing	<ul style="list-style-type: none"> • Printing onto paper • Printing directly onto textiles, plastic, glass, metal, wood and ceramics 		✓	✓	✓			
Service activities related to printing	Binding of printed sheets <ul style="list-style-type: none"> • Composition • Plate-making services • Engraving • Plate processes direct to plate • Preparation of plates and dies for relief stamping or printing • Design of printing products • Other graphic activities such 	✓	✓			✓	✓	

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
14. Manufacture of coke and refined petroleum products								
Manufacture of coke oven products	Operation of coke ovens Production of coke and semi-coke Production of pitch and pitch coke Production of coke oven gas Production of crude coal and lignite tars Agglomeration of coke	✓	✓	✓		✓	✓	
Manufacture of refined petroleum products	Includes the manufacture of liquid or gaseous fuels or other products from crude petroleum, bituminous minerals or their fractionation products.	✓	✓	✓		✓	✓	✓
15. Manufacture of chemicals and chemical products								
Manufacture of basic chemicals, fertilizers and nitrogen compounds, plastics and synthetic rubber in primary forms								
Manufacture of basic chemicals	Manufacture of chemicals using basic processes	✓	✓	✓	✓	✓	✓	✓
	Manufacture of liquefied or compressed inorganic industrial or medical gases	✓		✓		✓	✓	✓
	Manufacture of dyes and pigments			✓		✓	✓	✓
	Manufacture of inorganic acids except nitric acid	✓		✓		✓	✓	✓
	Manufacture of alkalis, lye and other inorganic bases except ammonia, other inorganic compounds, basic organic chemicals	✓		✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> • Manufacture of fermentation of sugarcane, corn or simila • Manufacture of distilled water 	✓		✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> • Manufacture of synthetic aromatic products 	✓	✓	✓		✓	✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
	Manufacture of products used as fluorescent brightening agents			✓		✓	✓	✓
	Enrichment of uranium and thorium ores and production of fuel elements for nuclear reactors		✓			✓	✓	✓
Manufacture of fertilizers and nitrogen compounds	<ul style="list-style-type: none"> Manufacture of fertilizers: Manufacture of associated nitrogen products 	✓	✓	✓	✓	✓	✓	✓
Manufacture of plastics and synthetic rubber in primary forms	Manufacture of resins, plastics materials and non-vulcanizable thermoplastic elastomers.	✓	✓	✓	✓	✓	✓	✓
	Manufacture of synthetic rubber Manufacture of mixtures of synthetic rubber and natural rubber or rubber-like gums	✓	✓	✓			✓	✓
Manufacture of other chemical products								
Manufacture of pesticides and other agrochemical products	<ul style="list-style-type: none"> Manufacture of insecticides, rodenticides, fungicides, herbicides Manufacture of anti-sprouting products, plant growth regulators Manufacture of disinfectants Manufacture of other agrochemical products n.e.c. 	✓	✓	✓	✓	✓	✓	✓
Manufacture of paints, varnishes and similar coatings, printing ink and mastics	<ul style="list-style-type: none"> Manufacture of paints, varnishes, enamels or lacquers Manufacture of pigments and dyes, opacifiers and colours Manufacture of mastics Manufacture of caulking compounds Manufacture of solvents and thinners 	✓	✓	✓	✓	✓	✓	✓
	Manufacture of printing ink	✓		✓		✓	✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Manufacture of soap and detergents. Cleaning and polishing preparations, perfumes and toilet preparations	Manufacture of: <ul style="list-style-type: none"> • Organic surface-active agents • Soap • Paper, wadding, felt • Crude glycerol • Surface-active preparations • Cleaning and polishing products • Perfumes and toilet preparations 	✓		✓			✓	✓
Manufacture of other chemical products n.e.c.	Manufacture of propellant powders			✓	✓	✓		✓
	Manufactures of explosives and pyrotechnic products, including percussion caps, detonators, signalling flares etc.					✓		✓
	<ul style="list-style-type: none"> • Manufacture of gelatine and its derivatives • Manufacture of extracts of aromatic products • Manufacture of resinoids • Manufacture of aromatic distilled waters • Manufacture of mixtures of odoriferous products for the manufacture of perfumes or food 	✓		✓		✓	✓	✓
	<ul style="list-style-type: none"> • Manufacture of photographic plates, films • Manufacture of chemical preparations • Manufacture of various chemical products: 	✓		✓	✓	✓	✓	✓
	Manufacture of matches			✓		✓		✓
Manufacture of man-made fibres	Manufacture of man-made fibres	✓					✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
16. Manufacture of basic pharmaceutical products and pharmaceutical preparations								
Manufacture of pharmaceuticals, medicinal chemical and botanical products	<ul style="list-style-type: none"> • Manufacture of medicinal active substances. • Manufacture of chemical contraceptive products • Manufacture of medical diagnostic preparations • Manufacture of biotech pharmaceuticals • Manufacture of radioactive diagnostic substances 	✓		✓	✓		✓	✓
17. Manufacture of rubber and plastics products								
Manufacture of rubber products								
Manufacture of natural rubber	<ul style="list-style-type: none"> • Manufacture of natural rubber in rubber mills via vulcanization 	✓		✓	✓	✓	✓	✓
Manufacture of rubber tyres and tubes; retreading	<ul style="list-style-type: none"> • Manufacture of rubber tyres 	✓	✓	✓	✓		✓	✓
	<ul style="list-style-type: none"> • Manufacture of interchangeable tyre • Tyre rebuilding and retreading 	✓	✓	✓	✓		✓	✓
Manufacture of other rubber products	<ul style="list-style-type: none"> • Manufacture of other products of natural or synthetic rubber 	✓	✓	✓	✓		✓	✓
Manufacture of plastics products	Processing of new or spent (i.e. recycled) plastics resins into intermediate or final products		✓		✓		✓	
	<ul style="list-style-type: none"> • Manufacture or semi-manufactures of plastic products • Manufacture of finished plastic 	✓	✓	✓	✓		✓	✓
18. Manufacture of other non-metallic mineral products								
Manufacture of glass and glass products	Manufacture of glass and glass products in all forms	✓	✓	✓		✓		✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Manufacture of non-metallic mineral products n.e.c.								
Manufacture of refractory products	<ul style="list-style-type: none"> • Manufacture of refractory mortars, concretes etc. • Manufacture of refractory ceramic 	✓	✓	✓		✓		✓
Manufacture of clay building materials	Manufacture of: <ul style="list-style-type: none"> • Non-refractory ceramic hearth or wall tiles, mosaic cubes etc. • Non-refractory ceramic flags and paving • Ceramic bricks, roofing tiles, chimney pots, pipes, conduits etc. • Flooring blocks in baked clay 	✓	✓	✓			✓	✓
Manufacture of porcelain and ceramic products	Example Ceramic tableware and other domestic articles	✓	✓	✓		✓	✓	✓
Manufacture of cement, lime and plaster	Manufacture of clinkers and hydraulic cements	✓	✓	✓		✓	✓	✓
	<ul style="list-style-type: none"> • Manufacture of lime • Manufacture of plasters • Manufacture of calcined dolomite 	✓		✓			✓	✓
Manufacture of articles of concrete, cement and plaster	<ul style="list-style-type: none"> • Manufacture of precast concrete, cement or artificial stone articles for use in construction • Manufacture of prefabricated structure • Manufacture of plaster articles for use in construction • Manufacture of building materials of vegetable substances • Manufacture of other articles of concrete, plaster, cement or artificial stone • Manufacture of concrete and mortars 	✓	✓	✓		✓	✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Cutting, shaping and finishing of stone	<ul style="list-style-type: none"> Cutting, shaping and finishing of stone Manufacture of stone furniture 	✓	✓	✓				✓
Manufacture of other non-metallic mineral products n.e.c.	<ul style="list-style-type: none"> Manufacture of millstones Manufacture of mineral insulating materials Manufacture of articles of diverse mineral substances: Carbon and graphite fibers and products 	✓	✓	✓			✓	✓
19. Manufacture of basic metals								
Manufacture of basic iron and steel	Operation of blast furnaces, steel converters, casting line producing iron and steel into semi-finished products	✓	✓	✓		✓		✓
	Operation of rolling and finishing mills to produce	✓	✓			✓		✓
Manufacture of basic precious and other nonferrous metals	Production of basic precious metals	✓		✓	✓	✓		
	Production and refining precious metals							
	<ul style="list-style-type: none"> Production of aluminium from alumina Production of aluminium from electrolytic refining of aluminium waste and scrap Production of aluminium oxide (alumina) 	✓	✓	✓	✓	✓	✓	✓
	<ul style="list-style-type: none"> Production of aluminium alloys Semi-manufacturing of aluminium 	✓	✓			✓	✓	✓
	Production of lead, zinc and tin	✓	✓	✓		✓		✓
	Semi-manufacturing of lead, zinc and tin	✓	✓			✓		✓
	Production of copper	✓	✓	✓		✓		✓
	<ul style="list-style-type: none"> Production of copper alloys Semi-manufacturing of copper 	✓	✓			✓		✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
	Production of chrome, manganese, nickel etc.	✓	✓	✓		✓		✓
	<ul style="list-style-type: none"> Production of chrome, manganese, nickel etc. Production of alloy chrome, manganese, nickel etc. Semi-manufacturing of chrome, manganese, nickel 			✓	✓			✓
	Production of uranium metal Smelting and refining of uranium	✓	✓	✓		✓		✓
Casting of metals								
Casting of iron and steel	<ul style="list-style-type: none"> Manufacture of semi-finished products Casting of semi-finished iron products 	✓	✓	✓		✓		✓
Casting of nonferrous metals	<ul style="list-style-type: none"> Casting of semi-finished products of aluminium, magnesium, titanium, zinc etc. Casting of metal castings 	✓	✓	✓		✓		✓
20. Manufacture of fabricated metal products, except machinery and equipment								
Manufacture of structural metal products, tanks, reservoirs and steam generators								
Manufacture of structural metal products	<ul style="list-style-type: none"> Manufacture of metal frameworks or skeletons Manufacture of industrial frameworks in metal Manufacture of prefabricated buildings of metal Manufacture of metal doors, windows etc. 	✓ (if using oven)	✓	✓				✓
Manufacture of tanks, reservoirs and containers of metal	<ul style="list-style-type: none"> Manufacture of reservoirs, tanks and similar containers of metal 		✓	✓			✓	
Manufacture of other fabricated metal products; metalworking service activities								
Forging, pressing, stamping and roll-forming of metal	<ul style="list-style-type: none"> Forging, pressing, stamping and roll-forming of metal Powder metallurgy 		✓					✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Treatment and coating of metals; machining	<ul style="list-style-type: none"> Plating, anodizing etc. of metals Heat treatment of metals Deburring, sandblasting, tumbling, cleaning of metals Colouring and engraving of metals Non-metallic coating of metals Hardening, buffing of metals Cutting of and writing on metals 	✓	✓	✓			✓	✓
Manufacture of cutlery, hand tools and general hardware	Example <ul style="list-style-type: none"> Domestic cutlery Knives and cutting blades Hand tools, tools for hand tools, Work tools Padlocks, locks, keys 	✓ (if using oven)	✓					✓
Manufacture of other fabricated metal products n.e.c.	Example <ul style="list-style-type: none"> Pails, cans, drums, buckets, boxes, tins and cans Metallic closures Metal cable and wire Rivets, screw, bolts, nut Metal household articles Metal goods for office use Safes, strongboxes, armoured doors etc. 	✓	✓		✓		✓	✓
21. Manufacture of computer, electronic and optical products								
Manufacture of electronic components	Manufacture of semiconductors and other components for electronic applications	✓		✓	✓		✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Manufacture of computers and peripheral equipment	Manufacture and/or assembly of electronic computers, and computer peripheral equipment	✓		✓	✓		✓	✓
Manufacture of communication equipment	Manufacture of telephone and data communications equipment used to move signals electronically over wires or through the air		✓	✓				✓
Manufacture of consumer electronics	Manufacture of electronic audio and video equipment for home entertainment, motor vehicle, public address systems and musical instrument amplification.	✓	✓	✓				✓
Manufacture of measuring, testing, navigating and control equipment; watches and clocks								
Manufacture of irradiation, electromedical & equipment	<ul style="list-style-type: none"> • Manufacture of irradiation apparatus and tubes • Manufacture of scanners and imaging equipment • Manufacture of pacemakers • Manufacture of hearing aids 	✓	✓			✓	✓	✓
Manufacture of optical instruments	Manufacture of optical instruments and lenses	✓		✓			✓	✓
Manufacture of magnetic and optical media	Manufacture of magnetic and optical recording media.	✓		✓			✓	✓
22. Manufacture of electrical equipment								
Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus	Manufacture of power, distribution and specialty transformers; electric motors, generators and motor generator sets; switchgear and switchboard apparatus; relays and industrial controls.		✓	✓				✓
Manufacture of batteries and accumulators	Manufacture of primary cells and primary batteries cells	✓	✓	✓		✓		

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Manufacture of wiring and wiring devices								
Manufacture of fibre optic cables	Manufacture of fibre optic cable for data transmission or live transmission of images	✓	✓	✓			✓	✓
Manufacture of other electronic and electric wires and cables	Manufacture of insulated wire and cable, made of steel, copper, aluminium	✓	✓	✓				✓
Manufacture of wiring devices	Manufacture of current-carrying and non-current carrying wiring devices for electrical circuits regardless of material.	✓	✓	✓			✓	✓
Manufacture of electric lighting equipment	Manufacture of electric light bulbs and tubes and parts, electric lighting fixtures and lighting fixture components	✓	✓		✓	✓	✓	✓
Manufacture of domestic appliances	Manufacture of small electric appliances and electric housewares	✓	✓				✓	✓
Manufacture of other electrical equipment	Manufacture of miscellaneous electrical equipment	✓	✓				✓	✓
23. Manufacture of machinery and equipment n.e.c.								
Manufacture of general-purpose machinery								
Manufacture of engines and turbines, except aircraft, vehicle and cycle engines	<ul style="list-style-type: none"> • Manufacture of engine • Manufacture of engine components • Manufacture of turbines and parts 	✓	✓	✓				✓
Manufacture of fluid power equipment	<ul style="list-style-type: none"> • Manufacture of hydraulic and pneumatic components • Manufacture of hydraulic transmission equipment 	✓	✓	✓			✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Manufacture of bearings, gears, gearing and driving elements	<ul style="list-style-type: none"> • Manufacture of ball and roller bearings • Manufacture of mechanical power transmission equipment • Manufacture of gears gearing and gear boxes • Manufacture of clutches and shaft couplings • Manufacture of articulated link chain • Manufacture of power transmission chain 	✓	✓	✓				✓
Manufacture of ovens, furnaces and furnace burners	<ul style="list-style-type: none"> • Manufacture of electrical and other industrial and laboratory furnaces and ovens, including incinerators • Manufacture of burners 	✓	✓	✓				✓
Manufacture of office machinery and equipment (except computers and peripheral equipment)	Manufacture of: <ul style="list-style-type: none"> • Mail handling machines, collating machinery • Typewriters, stenography machines, office-type binding equipment • Cheque writing machines • Coin counting and coin wrapping machinery • Stationary • Cash registers, mechanically operated • Photocopy machines, toner cartridges • Boards 	✓	✓	✓				✓
Manufacture of power-driven hand tools	Manufacture of hand tools, with self-contained electric or non-electric motor or pneumatic drive	✓	✓	✓				✓
Manufacture of other general-purpose machinery	Manufacture of other general-purpose machinery	✓	✓	✓			✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Manufacture of special-purpose machinery	Manufacture of special-purpose machinery	✓	✓	✓			✓	✓
24. Manufacture of motor vehicle, trailers and semi-trailers								
Manufacture of motor vehicles	Manufacture of: <ul style="list-style-type: none"> • Passenger cars • Commercial vehicles • Buses, trolley-buses and coaches • Motor vehicles • Chassis fitted with engines • Other motor vehicles 	✓	✓	✓				✓
Manufacture of bodies for motor vehicles	<ul style="list-style-type: none"> • Manufacture of bodies for motor vehicles • Outfitting 	✓	✓					✓
Manufacture of parts and accessories for motor vehicles	<ul style="list-style-type: none"> • Manufacture of parts and accessories of bodies for motor vehicles • Manufacture of car seats • Manufacture of motor vehicle electrical equipment 	✓	✓					✓
25. Manufacture of other transport equipment								
Building of ships and boats								
Building of ships and floating structures	Building of ships, except vessels for sports or recreation, and the construction of floating structures		✓	✓				✓
Building of pleasure and sporting boats	<ul style="list-style-type: none"> • Manufacture of boats, watercraft, hovercraft, canoes, kayaks, rowing boats, skiffs 		✓	✓				✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Manufacture of railway locomotives	<ul style="list-style-type: none"> • Manufacture of rail locomotives • Manufacture railway coaches, vans and trucks • Manufacture of railway or tramway rolling stock • Manufacture of specialized parts of railway • Manufacture of mechanical and electromechanical signalling, safety and traffic control equipment 	✓ (if use ovens for heating)	✓	✓				✓
Manufacture of air and spacecraft and related machinery	<ul style="list-style-type: none"> • Manufacture of airplanes • Manufacture of helicopters • Manufacture gliders, hang-gliders • Manufacture of dirigibles and hot air balloons • Manufacture of parts and accessories 		✓	✓				✓
Manufacture of military fighting vehicles	<ul style="list-style-type: none"> • Manufacture of tanks • Manufacture of military vehicles 		✓	✓				✓
Manufacture of transport equipment n.e.c.								
Manufacture of motorcycles	<ul style="list-style-type: none"> • Manufacture of motorcycles • Manufacture of engines for motorcycles • Manufacture of parts and accessories for motorcycles 		✓	✓				✓
Manufacture of other transport equipment n.e.c.	<ul style="list-style-type: none"> • Manufacture of hand-propelled vehicles • Manufacture of vehicles drawn by animals 		✓	✓				✓
26. Manufacture of furniture								
Manufacture of furniture	Manufacture of indoor and outdoor furniture, office furniture, kitchen furniture	✓	✓	✓			✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
27. Other manufacturing								
Manufacture of jewellery, bijouterie and related articles								
Manufacture of jewellery and related articles	<ul style="list-style-type: none"> • Production of precious and semi-precious stones • Working of diamonds • Manufacture of jewellery of precious metal or of base metals • Manufacture of goldsmiths' articles of precious metals or of base metals • Manufacture of technical or laboratory articles of precious metal • Manufacture of precious metal bands • Manufacture of coins • Engraving 		✓	✓				✓
Manufacture of imitation jewellery and related articles	<ul style="list-style-type: none"> • Manufacture of costume or imitation jewellery • Manufactured of metal watch bands 		✓	✓			✓	✓
Manufacture of sports goods	Manufacture of sporting and athletic goods Manufacture of articles and equipment for sports		✓				✓	✓
Manufacture of games and toys	Manufacture of dolls, toys and games, scale models, and children's vehicles		✓				✓	✓
Manufacture of medical and dental instruments and supplies	Manufacture of laboratory apparatus, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures and orthodontic appliances		✓				✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Other manufacturing n.e.c.	<ul style="list-style-type: none"> • Manufacture of protective safety equipment • Manufacture of brooms and brushes • Manufacture of shoe and clothes brushes • Manufacture of pens and pencils • Manufacture of date, sealing or numbering stamps, hand-operated devices for printing • Manufacture of umbrellas, walking sticks • Manufacture of buttons and fasteners • Manufacture of articles of personal use • Manufacture of miscellaneous articles 		✓					✓
28. Repair and installation of machinery and equipment								
Repair of fabricated metal products, machinery and equipment								
Repair of fabricated metal products	Repair and maintenance of fabricated metal products		✓	✓		✓		✓
Repair of machinery	Repair and maintenance of industrial machinery and equipment.		✓	✓			✓	✓
Repair of other equipment	Repair and maintenance of equipment not covered in other groups of this division. <ul style="list-style-type: none"> • Repair of fishing nets, including mending • Repair of ropes, riggings, canvas and tarps • Repair of fertilizer and chemical storage bags • Repair or reconditioning of wooden pallets, shipping drums or barrels, and similar items • Repair of pinball machines and other coin-operated games • Restoring of organs and other historical musical instruments 			✓				✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
29. Electricity, gas, steam and air conditioning supply								
Electric power generation, transmission and distribution	• Generation and transmission of electric power–gas fired.	✓	✓	✓		✓		
	• Generation and transmission of electric power–coal	✓	✓	✓		✓		
	• Generation and transmission of electric power–distillate.	✓	✓	✓		✓		
	• Operation of generation facilities that produce electric energy from hydro					✓		
	• Operation of generation facilities that produce electric energy from renewable sources (solar)					✓		
	• Operation of transmission systems					✓		
	• Operation of distribution systems					✓		-
Manufacture of gas; distribution of gaseous fuels through mains	Production of gas for the purpose of gas supply by carbonation of coal, from by-products of agriculture or from waste	✓	✓	✓		✓		✓
	Manufacture of gaseous fuels with a specified calorific value, by purification, blending and other processes from gases of various types including natural gas							
	Transportation, distribution and supply of gaseous fuels of all kinds through a system of mains			✓		✓		✓
Steam and air conditioning supply	• Production, collection and distribution of steam and hot water for heating, power and other purposes	✓				✓		
	• Production and distribution of cooled air			✓				

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
	<ul style="list-style-type: none"> Production and distribution of chilled water for cooling purposes 		✓					
	<ul style="list-style-type: none"> Production of ice, including ice for food, and non-food (e.g. cooling) purposes 		✓					
30. Water collection, treatment and supply								
Water collection, treatment and supply	Water collection, treatment and distribution activities for domestic and industrial needs. The operation of irrigation canals						✓	✓
31. Sewerage								
Sewerage	Operation of sewer systems or sewage treatment facilities Treatment of wastewater				✓		✓	✓
	Temporary STP for construction activities				✓		✓	✓
Wastewater Treatment	Operation of wastewater treatment facilities for industries				✓	✓	✓	✓
32. Waste collection, treatment and disposal activities; materials recovery								
Waste treatment and disposal	Disposal at landfill for <ul style="list-style-type: none"> Municipal waste Non-toxic and non-hazardous waste Dead animals Disposal of transition medical waste Disposal of waste by incineration of combustion Dumping of refuse on land or in water 	✓	✓	✓	✓	✓	✓	✓
	Disposal at landfill for <ul style="list-style-type: none"> Construction waste Inert wastes 			✓	✓		✓	✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
	Disposal at landfill for <ul style="list-style-type: none"> • Toxic and Hazardous waste • Scheduled wastes • Toxic and/or contaminated animals • Other contaminated waste 	✓	✓	✓	✓	✓	✓	✓
	Disposal for transition medical waste from hospitals	✓	✓	✓	✓	✓	✓	✓
	Treatment prior to disposal of various forms of waste by different means, such as waste treatment of organic waste with the aim of disposal;	✓	✓	✓	✓	✓	✓	✓
	Generation of electricity resulting from waste incineration processes	✓	✓	✓	✓	✓	✓	✓
Treatment and disposal of non-hazardous waste	Operation of landfills for the disposal of non-hazardous waste			✓	✓		✓	✓
	Treatment of non-hazardous waste by combustion or incineration or other methods	✓	✓	✓	✓		✓	✓
	Treatment of organic waste for disposal						✓	✓
	Production of compost from organic waste		✓	✓	✓		✓	✓
Treatment and disposal of hazardous waste	Operation of facilities for treatment of hazardous waste Incineration of hazardous waste	✓	✓	✓	✓	✓		✓
	Treatment and disposal of toxic live or dead animals and other contaminated waste	✓	✓	✓	✓	✓	✓	✓
	Disposal of used goods to eliminate harmful waste					✓		✓

Industry	Description of Industry	Environmental Impacts (General)						
		Stack Emission	Noise	Air (fugitive)	Odour	Safety Risk	Water (Effluent)	Waste Generation
Materials recovery	Processing of metal and non-metal waste and scrap and other articles into secondary raw materials							
	Recovery of materials from waste streams in the form of: <ul style="list-style-type: none"> • Separating and sorting recoverable materials from non-hazardous waste streams • Separating and sorting of commingled recoverable materials 		✓	✓	✓		✓	✓
	<ul style="list-style-type: none"> • Processing of food, beverage and tobacco waste and residual substances into secondary raw materials 	✓		✓	✓		✓	✓