These products may have residues of oils, solvents and metal particles, which are potential sources of pollutants to storm water discharges. Similarly, scrap metal will have the same residues, and is almost always stored outdoors in bins before being sold to scrap metal recyclers.

The manufacturing process produces several types of hazardous and nonhazardous wastes. Hazardous wastes including paint wastes, solvent wastes, and sludge wastes are generated in small quantities at the facilities within this industrial group. Paint wastes result from painting operations and consist of paints and paint thinners. Solvent wastes result from metal cutting, shaping, and cleaning operations. As the metals are manufactured into different parts and treated with various chemicals, the different assembly parts must be cleaned with solvents to remove any chemical residues and rinsed with water. The metal parts are subject to more cleaning with detergents to remove the solvents and chemical residues and rinsed again with water to remove the detergents. Sludge wastes are generated when wastewater discharges from painting, plating, finishing and parts cleaning operations are treated, and is generally shipped offsite for disposal. Hazardous wastes are stored in 55 gallon drums outdoors before shipment and may be exposed to storm water discharges.

Nonhazardous wastes from this industry group include glass, tires, used wooden pallets, used equipment and machinery, as well as plastics and rubber wastes. All of these waste

materials are stored outdoors and have the potential to pollute storm water discharges. Storm water runoff from these materials could include solids, oils, solvents and other pollutants generated in the manufacturing process.

Air emissions from stacks and ventilation systems are potential areas for exposure of materials to storm water discharges. Facilities which have high levels of engine exhaust from the manufacturing equipment, paint residue, and particulates in fumes from metal processing activities such as cutting, grinding, shaping, and welding, are subject to having particulate in the air emissions that may pollute storm water discharges.

Material handling activities such as loading and unloading areas may be exposed to storm water discharges. These are areas where significant materials are received and shipped at the facilities. Exposure of these materials to storm water may be minimized by having shipping/receiving areas under cover.

For those facilities engaged in fueling and vehicle maintenance, gasoline and diesel fuel are frequently stored outdoors in aboveground storage tanks and 55 gallon drums. Most vehicles and equipment also require oil, hydraulic fluids, antifreeze, and other fluids that may leak and contaminate storm water discharges. The discharges from these areas are addressed elsewhere in today's permit.

2. Pollutants Found in Storm Water Discharges From Facilities Which Manufacture Transportation Equipment, Industrial or Commercial Machinery

The impact of industrial activities at facilities which manufacture transportation equipment, industrial or commercial machinery on storm water discharges will vary. Factors at a site which influence the water quality include geographic location, hydrogeology, the industrial activities exposed to storm water discharges, the facility's size, the types of pollution prevention measures/best management practices in place, and the type, duration, and intensity of storm events. Taken together or separately, these factors determine how polluted the storm water discharges will be at a given facility. For example, scrap piles may be a significant source of pollutants at some facilities, while particulate stack emissions may be the primary pollutant source at others. Additionally, pollutant sources other than storm water, such as illicit connections, spills, and other improperly dumped materials, may increase the pollutant loading discharged into Waters of the United States.

Table AB-1 lists industrial activities that commonly occur at transportation equipment, industrial or commercial machinery manufacturers, the pollutant sources at these facilities, and pollutants that are associated with these activities. Table AB-1 identifies oil and grease, TSS, organics, and other parameters as potential pollutants associated with facilities covered by this section.

TABLE AB-1.—DESCRIPTION OF INDUSTRIAL ACTIVITIES, POTENTIAL POLLUTANT SOURCES, AND POSSIBLE POLLUTANTS

Activity	Pollutant source	Pollutants
Outdoor Material Loading/Unloading	Wooden pallets, castings, foundry sand, limestone, spills/leaks from material handling equipment, solvents.	
Outdoor Material and Equipment Storage.	Foundry sand, limestone, used equipment, above ground tanks, scrap metal, oil and grease, raw materials (e.g., aluminum, steel, iron, copper), castings, solvents, acids, and paints.	

Source: NPDES Storm Water Group Applications—Part 1. Received by EPA, March 18, 1991 through December 31, 1992.

Based on the similarities of the facilities included in this sector in terms of industrial activities and significant materials, EPA believes it is appropriate to discuss the potential pollutants at industrial and commercial machinery and transportation equipment

manufacturing facilities as a whole and not subdivide this sector. Therefore, Table AB–2 lists data for selected parameters from facilities in the industrial and commercial machinery and transportation equipment manufacturing sector. These data

include the eight pollutants that all facilities were required to monitor for under Form 2F, as well as any additional pollutants with median concentrations higher than the benchmarks.