

same drum and mixed with the aggregate to produce asphalt concrete. The hot asphalt concrete produced by this process then goes to a surge bin or silo for storage until it is loaded onto trucks for delivery.

Hot-mix asphalt plants are often portable. There are three types of portable plants: portable, permanent, and semipermanent. Portable plants move from site to site, and the significant materials and equipment are removed upon completion of the job or project. Portable plants remain at a site anywhere from several days to several months. Permanent portable plants remain at a site on a permanent basis.

Like portable plants, semipermanent plants move from site to site. They differ, however, in that they return to locations on a recurring basis. Significant materials such as aggregate piles remain at the site while the plant is operating elsewhere. For the purposes of this section, semipermanent plants will be referred to as permanent plants, given that the effect on runoff from significant materials will essentially be the same at both sites. 'Asphalt facilities' includes both permanent and portable plants unless specified otherwise.

Facilities which manufacture asphalt concrete block feed the asphalt/aggregate mixture into a block molding machine where the mix is rammed, pressed or vibrated into its final form. The product is then stacked and allowed to cure.

(2) *Manufacturers of Roofing Materials (SIC 2952)*. Manufacturers classified in standard industrial code 2952 typically produce bitumen-based roofing products such as asphalt shingles, built-up roofing (BUR), modified bitumen sheet material, asphalt saturated felts and bitumen-based root coatings, mastics and cements.

The typical manufacturing of bitumen based roofing products, such as shingles, BUR, modified bitumen sheet materials and asphalt saturated felt is a continuous stationary process performed on a roofing machine that begins with a roll of base material such as fiberglass mat, polyester or organic felt, coated or saturated with an asphalt or blend, surfaced with mineral granules, and concludes with a finished product. The sequence of indoor operations builds the product up in

stages, adding different raw materials along the way and monitoring their application.

Bitumen-based coatings, mastics and cements are produced inside in a stationary process mixing raw materials received in bulk and containers and blended into finished batches of product. "Batch processing" is the common production method relying on the same piece of equipment in manufacturing a variety of products. The products are packaged in containers or stored for bulk shipment.

(3) *Manufacturers of Lubricating Oils and Greases (SIC 2992)*. Facilities primarily engaged in blending, compounding, and re-refining lubricating oils and greases from purchased mineral, animal, and vegetable materials are identified as SIC code 2992. SIC code 2992 includes manufacturers of metalworking fluids, cutting oils, gear oils, hydraulic brake fluid, transmission fluid, and other automotive and industrial oil and greases.

Raw materials for SIC code 2992 facilities are typically petroleum or synthetic-based stocks and various additives. The majority of lubricating manufacturers store base stocks and chemical additives in tank farms or 55-gallon drums. SIC code 2992 facilities do not manufacture these raw materials, but rather blend and compound them to produce the product. Raw materials are proportioned according to the type of lubricant being produced.

"Batch processing" is the common production method relying on the same piece of equipment in manufacturing a variety of products. For example, in one "batch" a facility may combine the petroleum base stock with additive X in a 10,000 gallon blending tank to produce product "A." Using the same blending tank, the next "batch" is a mixture of the base stock and additive Y to produce product "B." Batch processing allows facilities to manufacture a variety of products. Some facilities, however, tend to specialize in producing a particular type of lubricant (e.g., solid, synthetic, or water-based), often to meet the demands of a specific industry.

Finished products are packaged in containers or stored for bulk shipment. Almost all facilities have shipping and receiving areas and are involved with marketing and interstate distribution of

their products. Most facilities have immediate access roads or rail lines at their facility sites.

2. Pollutants in Storm Water Discharges Associated With Asphalt Facilities and Lubricant Manufacturers.

Impacts caused by storm water discharges from asphalt facilities and lubricant manufacturers will vary. Several factors influence to what extent significant materials from these types of facilities and processing operations may affect water quality. Such factors include: geographic location; hydrogeology; the type of industrial activity occurring outside (e.g., material storage, loading and unloading); the type of material stored outside (e.g., asphalt, aggregate, limestone, oil, etc.); the size of the operation; and type, duration, and intensity of precipitation events. These and other factors will interact to influence the quantity and quality of storm water runoff. For example, air emissions (i.e., settled dust) may be a significant source of pollutants at some facilities, while materials storage is a primary source at others. In addition, sources of pollutants other than storm water, such as illicit connections,³⁸ spills, and other improperly dumped materials, may increase the pollutant loadings discharged into waters of the United States.

Based on group application information and data, EPA has identified the storm water pollutants and sources resulting from asphalt facilities and lubricant manufacturers in Tables D-2 and D-3.

Based on the wide variety of industrial activities and significant materials at the facilities included in this sector, EPA believes it is appropriate to divide the asphalt paving and roofing materials manufacturers and lubricating oils and greases manufacturers industry into 2 subsectors to properly analyze sampling data and determine monitoring requirements. As a result, this sector has been divided into the following subsectors: asphalt paving and roofing materials and lubricating oils and greases manufacturers. The tables below include data for the eight pollutants that all facilities were required to monitor under Form 2F.

³⁸ Illicit connections are contributions of unpermitted non-storm water discharges to storm sewers from any of a number of sources including

sanitary sewers, industrial facilities, commercial establishments, or residential dwellings. The probability of illicit connections at mineral mining

and processing facilities is low yet it still may be applicable at some operations.