## MOVING TOWARD SMALL QUANTITY HAZARDOUS WASTE MANAGEMENT FOR PESTICIDE END-USERS

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As background for my discussion on Small Quantity Hazardous Waste generators (SQG s), I would like to summarize the recent development of federal legislation in this area. Small quantities of hazardous waste were first considered a management issue with the passage of the Resource Conservation and Recovery Act of 1976 (RCRA). RCRA regulations enacted by EPA defined, for the first time, SQG as those establishments that produce 1000 kg of hazardous waste or less each month. Establishments that met this criteria were made exempt from all RCRA hazardous waste regulations. Subsequent reevaluations on the impact of placing the cutoff level at 1000 kg/mo resulted in increased public and congressional pressure to reduce the level of exemption. In the winter of 1984, federal action was initiated that lowered the ceiling for SQG exemption down to 100 kg/mo. Now, for the first time many service industries and medium to small manufacturing industries that previously had no experience with waste management laws were brought under federal hazardous waste management authority.

The Resource Conservation and Recovery Act was enacted as an amendment to the Solid Waste Disposal Act of 1976. It established the Nation's basic hazardous waste management system under subtitle C of the Act. Following enactment, public attention and enforcement action focused on large quantity generators which were estimated to be responsible for 99% of the 150 million metric tons of hazardous waste generated annually in the United States.

The first major package of regulations covering hazardous waste management was published by EPA in May of 1980 to implement Subtitle C. The regulations, which became effective on November 19, 1980, put into place waste identification, manifesting, transportation and intrim status treatment, storage and disposal requirements. As a result of an EPA decision at that time, SQG's that produced 1000 kg/mo (approximately 5-55 gallon drums) or less were made exempt from all hazardous waste regulations. This decision was based on the belief that SQG's were responsible for just one percent of all hazardous waste generated. Exemption of this group of generators allowed them to legally dispose of their wastes into sanitary landfills and into sewers connected to public waste water treatment plants. In addition, SQG's were not required to package hazardous waste in a safe manner or to notify transporters they were transporting hazardous wastes in their vehicles. As the original RCRA legislation began to expire, Congressional debate on its reauthorization started to focus on the SQG The House Subcommittee on Commerce, Transportation and Tourism loophole. requested that the office of Technology Assessment review the basis for EPA's initial policy to exempt from regulation generators producing less than 1000 kg/mo of hazardous waste. OTA's analysis indicated that EPA's decision to set the exemption level at 1000 kg/mo was technically unjustified. OTA concluded that the volume of hazardous waste generated by Small Quantity generators was greatly underestimated by contractors in their original studies, and recommended the exemption level be lowered to 100 kg/mo or less. OTA also suggested that use of sanitary landfills by SQG be minimized and that EPA be allowed the flexibility to establish regulations

for SQGs. This basic position was supported by many special interest groups including the U.S. Chamber of Commerce and the National Solid Waste Management Association during public hearings on RCRA's reauthorization.

On November 8, 1984 the President signed the Hazardous and Solid Waste Amendments of 1984 (PL 98-616), which reauthorized the Resource Conservation and Recovery Act through 1987. Responding to overwhelming bipartisan support in both the House and Senate, the new amendments represent a major new thrust in hazardous waste management in the US and perhaps a new tendency on the part of Congress toward increased regulatory detail in its environmental legislation.

Most important to my discussion is the amendment to RCRA Section 3001 -Small Quantity Generator Waste. It is one of the most far-reaching sections of the bill in terms of the number and types of businesses affected. The amendments specify that EPA must write standards for hazardous waste generated by those establishments producing between 100 and 1000 kg/mo. Once rules are developed, the changes allow EPA the flexibility to vary from conventional Subtitle C regulations to strengthen or reduce regulations enough to protect public health and the environment. However, if EPA fails to issue rules by March 31, 1986 small quantity generators that produce more than 100 kg/mo, will automatically be governed by requirements to use a manifest, dispose of waste only in a RCRA interim status or, permitted hazardous waste facility, and will be prohibited from accumulating waste on-site for more than 180 days (unless the waste must be transported more than 200 miles, in which case it may be stored for 270 days, provided no more than 6000 kgs is stored during the 270 days), file exception reports and retain manifest records for a minimum of three years. Before the rules are issued, beginning August 7, 1985, SQG's will be required to use the national uniform manifest on all shipments of waste off-site.

EPA's preliminary results from a two-year study indicate that up to 200,000 businesses could be affected by the new regulations. For the great majority of such industries as laundries, auto repair shops, printers and some wholesale and retail stores, it will be their first experience with federal hazardous waste regulations. It is unlikely that these businesses are even aware that they are hazardous waste generators, they are probably unaware that there is even a program to regulate the management of hazardous waste. They may also be forced to deal with a potential adverse public reaction when it becomes apparent that they are hazardous waste generators and have been sending the hazardous waste to the local solid waste landfill. The challenge for them will be to find someone to handle their wastes at an affordable price. Forced out of the local solid waste landfills and municipal sewers, Small Quantity Generators will be demanding new services.

The new requirements unquestionnably will prove complicated and time consuming for small businesses not yet familiar with government paperwork requirements administrative burden will require additional recordkeeping, filing of reports and maintenance of manifests and records. Not until SQGs begin to understand precisely what will be expected of them and what their compliance liabilities may be will substantial progress be made to protect public health and the environment. The massive challenge facing federal, state and local officials is advising 200,000 small businesses that they are in fact covered by the new program which commenced on August 5, 1985.

The only hope for meeting this challange in a cost effective manner is to enlist the services of trade associations to help aggregate (on paper) the individual small quantities of unwanted pesticides and coordinate the collection, transportation and disposal for their members. Working in conjunction with the numerous Waste Exchange Services (in Michigan and the Great Lakes Region-the Great Lakes Regional Waste Exchange, sponsored by Waste Systems Institute, 470 Market, S.W., Grand Rapids, Michigan 49503, 616/451-8992) available potential users for unwanted material could be arranged. By creating such an arrangement, long-term liability associated with improper disposal could be eliminated and cost for individual members greatly reduced.