

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 260, 261, 262, 263, 270, and 271

[SWH-FRL-2969-2(b)]

Hazardous Waste Management System: General; Identification and Listing of Hazardous Waste; Standards for Generators of Hazardous Waste; Standards for Transporters of Hazardous Waste; EPA Administered Permit Programs; Authorization of State Hazardous Waste Programs

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: On August 1, 1985, the U.S. Environmental Protection Agency (EPA) proposed regulations under the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), that would be applicable to generators of between 100 kg and 1000 kg of hazardous waste in a calendar month ("100-1000 kg/mo generators"). Based in large measure on the existing hazardous waste regulatory program, the proposed rules represented the Agency's efforts to balance the statutory mandate to protect human health and the environment with the statutory directive to keep burdensome regulation of small businesses to a minimum.

EPA is today promulgating final regulations for these generators which modify certain aspects of the proposal. These modifications relate to the "small quantity generator" provisions of § 261.5 and the use of the multi-copy manifest in lieu of the proposed single copy system. Exemptions from exception and biennial reporting as well as from the manifest system for certain reclamation shipments and from certain of the requirements applicable to on-site accumulation have been retained in the final rules. The effect of this rule would be to subject generators of between 100 kg and 1000 kg of hazardous waste in a calendar month to the hazardous waste regulatory program.

DATES: EFFECTIVE DATE: September 22, 1986.

Compliance Dates: The Part 262 standards will become applicable to 100-1000 kg/mo generators on September 22, 1986.

The Part 264 and 265 standards will become applicable to 100-1000 kg/mo generators treating, storing, or disposing of hazardous waste on-site using non-

exempt management practices on March 24, 1987.

For off-site facilities managing wastes from 100-1000 kg/mo generators, the Part 264 or 265 standards will apply to the wastes from generators of 100-1000 kg/mo on September 22, 1986.

For off-site facilities managing wastes exclusively from generators of less than 1000 kg/mo, the requirement to obtain interim status as a hazardous waste facility for wastes from 100-1000 kg/mo generators will become applicable on September 22, 1986.

Off-site facilities managing waste from both large quantity generators and generators 100-1000 kg/mo will need to modify their Part A permit applications (as well as Part B if already submitted) by September 22, 1986 to reflect these newly regulated wastes from 100-1000 kg/mo generators.

ADDRESSES: The public docket for this rulemaking is located in Rm S-212-C, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC. The RCRA Docket is available for viewing 8:00 a.m. to 4:00 p.m. Monday through Friday, excluding holidays. As provided in 40 CFR Part 2, a reasonable fee may be charged for copying services.

FOR FURTHER INFORMATION CONTACT: The RCRA/Superfund Hotline, (800) 424-9346, (in Washington, DC, call 382-3000), the Small Business Hotline, (800) 368-5888, or Robert Axelrad, (202) 382-5218, Office of Solid Waste (WH-562B), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

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I. Authority

These regulations are being promulgated under authority of section 2002(a), 3001, 3002, 3004, 3005, 3006, 3010, 3015, 3017, and 3019, of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6912(a), 6921, 6922, 6924, 6925, 6926, 6930, 6935, 6939, 6991, and 6993.

II. Background and Summary of Final Rule

A. The Hazardous and Solid Waste Amendments of 1984

On November 8, 1984, the President signed Pub. L. 98-616, titled The Hazardous and Solid Waste Amendments of 1984 (HSWA). These comprehensive amendments will have far-reaching ramifications for EPA's hazardous waste regulatory program and will impact a very large number of businesses in the United States. Further, Congress has established in these amendments ambitious schedules for the imposition of the requirements that EPA must promulgate.

With respect to regulation of small quantity generators (*i.e.*, generators of less than 1000 kg of hazardous waste in a calendar month) the HSWA added a new subsection (d) to Section 3001 of RCRA designed to modify EPA's current regulatory exemption of wastes generated by small quantity generators from full Subtitle C regulation (40 CFR 261.5). Section 3001(d) directs EPA to develop a comprehensive set of standards which will apply to hazardous wastes produced by small quantity generators of between 100 and 1000 kg of hazardous waste in a calendar month ("generators of 100-1000 kg/mo"). EPA is required to promulgate final standards no later than March 31, 1986. Today's final rule satisfied this requirement. In addition, section 3001(d) imposes certain minimum requirements on these generators prior to that date and requires EPA to complete a number of studies before April 1987.

1. Codification Rule

On July 15, 1985, EPA published in the Federal Register a Final Rule which codified a number of legislatively mandated provisions contained in the HSWA (see 50 FR 28702-28755, July 15, 1985). Among those provisions is the requirement of section 3001(d)(3) that effective 270 days from the date of enactment, all off-site shipments of hazardous waste from generators of greater than 100 kg but less than 1000 kg of hazardous waste during a calendar month must be accompanied by a copy of the Uniform Hazardous Waste Manifest, signed by the generator, and containing the following information:

- The name and address of the generator of the waste;
- The U.S. Department of Transportation (DOT) description of the waste, including the proper shipping name, hazard class, and identification number (UN/NA);
- The number and type of containers;

- The quantity of waste being transported; and
- The name and address of the facility designated to receive the waste.

The information required by this provision (codified at 40 CFR 261.5(h)(3)) corresponds to Items 3, 9, 11, 12, 13, 14, and 16, of EPA form 8700-22 and accompanying instructions promulgated on March 20, 1984 (49 FR 10490). These information requirements conform to DOT shipping requirements designed to provide necessary information to handlers of hazardous materials (*e.g.*, transporters and emergency response personnel).¹ The interim manifest requirement applies only until the effective date of the regulations being promulgated today. These final rules will supersede the existing manifest requirements for these generators.

The HSWA provisions, together with existing regulations, distinguish three main classes of small quantity generators for regulatory purposes: (1) Those generating between 100 and 1000 kg of non-acutely hazardous waste per calendar month; (2) those generating up to 100 kg of non-acutely hazardous waste per calendar month; and (3) those generating acutely hazardous wastes in quantities currently set forth in § 261.5(e). These classes of small quantity generator are distinguished in the July 1985 "Codification Rule". Until the effective date of today's final rules, under the regulatory system imposed by 40 CFR 261.5 implementing section 3001(d) of the HSWA, a small quantity generator in the first group (*i.e.*, producing between 100 and 1000 kg of non-acutely hazardous waste in a calendar month) is subject to the following requirements:

- (1) He must determine if his waste is hazardous under 40 CFR 262.11 (§ 261.5(h)(1));
- (2) He may conditionally accumulate hazardous waste on-site provided he does not exceed the quantity limitation contained in § 261.5(h)(2);
- (3) After August 5, 1985, he must partially complete and sign a single copy of the Uniform Hazardous Waste Manifest to accompany any off-site shipment of hazardous waste (§ 261.5(h)(3)); and
- (4) He must treat or dispose of his hazardous waste on-site, or ensure delivery to an off-site treatment, storage, or disposal facility. The on-site or off-site facility must be either: (i) Permitted

¹ While 100-1000 kg/mo generators are not now required to complete the entire manifest under Federal law, many States operating their own hazardous waste programs may already require additional information on the manifest or require use of the State's version of the Uniform Hazardous Waste Manifest.

by EPA pursuant to Section 3005 of RCRA or by a State having an authorized permit program under Part 271; (ii) in interim status under Parts 270 and 265; (iii) permitted, licensed, or registered by a State to manage municipal or industrial solid waste; or (iv) a facility which beneficially uses or reuses, or legitimately recycles or reclaims the waste, or treats the waste prior to reuse, recycling or reclamation (§ 261.5(h)(4)).

As discussed in the remainder of this preamble, 100-1000 kg/mo generators will be regulated under Part 262-266 and Parts 270 and 124 when today's rules become effective, to the extent that rules apply.

Generators of less than 100 kg of hazardous waste in a calendar month will remain conditionally exempt from most of the hazardous waste program, as provided in § 261.5(g). For example, generators of less than 100 kg are not required to comply with any manifesting provisions. No additional requirements apply to this class of hazardous waste generator under the existing rules unless the quantity limitations contained in § 261.5(g) are exceeded.

Generators that produce acutely hazardous waste and do not exceed the quantity limitations for such waste under § 261.5(e) will also be conditionally exempt from regulation. No additional requirements apply to this class of generators unless the quantity limitations contained in § 261.5(e) are exceeded, at which point the acutely hazardous waste becomes subject to the full generator requirements of 40 CFR Part 262.

2. Minimum Rulemaking Requirements

Section 3001(d)(1) of the HSWA requires EPA to promulgate, by March 31, 1986, standards under sections 3002, 3003, and 3004, for hazardous wastes generated by a generator in a total quantity greater than 100 but less than 1000 kilograms in a calendar month. Standards developed under this section must be sufficient to protect human health and the environment but "may vary from the standards applicable to hazardous waste generated by larger quantity generators" [emphasis added] (section 3001(d)(2)). EPA is further authorized to promulgate standards for generators of less than 100 kg/mo of hazardous waste if the Administrator determine it is necessary to do so to protect human health and the environment (section 3001(d)(4)).

At a minimum, standards issued pursuant to section 3001(d)(1) must require that all treatment, storage, and disposal of hazardous wastes from

generators of between 100 and 1000 kg of hazardous waste in a calendar month occur at a facility with interim status or a permit issued under section 3005 of RCRA. The standards must also allow generators of between 100 and 1000 kg of hazardous waste during a calendar month to store waste on-site for up to 180 days without being required to obtain a RCRA permit. If a generator must ship or haul his waste greater than 200 miles, that generator may store up to 6000 kg of hazardous wastes for up to 270 days without a permit (section 3001(d)(6)). These minimum requirements are embodied in today's final rule.

In addition, the Agency has interpreted the statute to require that, at a minimum, EPA's regulations must provide for continuation of the August 1985 requirement that off-site shipments of hazardous waste from 100-1000 kg/mo generators be accompanied by a single copy of the Uniform Hazardous Waste Manifest containing at least the information specified in section 3001(d)(3). See H.R. Report No. 198, 98th Cong, 1st Sess. 25-28 (1983); S. Rep. No. 284, 98th Cong. 1st Sess. 8 (1983); H.R. Rep. No. 133, 98th Cong., 2nd Sess., 101-103 (1984).

The Agency believes that at a minimum Congress intended that the Agency's regulations incorporate the partial Uniform Hazardous Waste Manifest requirements in order to provide notice of the hazardous nature of the waste to transporters and facilities. In addition, the Agency is specifically authorized to expand the manifest requirements if necessary to protect human health and the environment. See section 3001(d)(3). As discussed in Unit III.C.2. of today's preamble, EPA has concluded that additional manifest requirements are necessary to ensure protection of human health and the environment.

3. March 31, 1986 Hammer Provisions

If EPA had failed to promulgate standards for hazardous waste generators producing greater than 100 kg but less than 1000 kg in a calendar month by March 31, 1986, these generators would have been subject to certain legislatively stipulated provisions.

The promulgation of today's final rule prior to March 31, 1986, however, effectively voids the hammer provisions of the HSWA with respect to small quantity generators. Consequently, the requirements promulgated today are the only requirements which 100-1000 kg/mo generators must comply with. As discussed in Unit IV, the Part 262 requirements applicable to 100-1000 kg/

mo generators that manage waste off-site will take effect six months from today while the requirements of Parts 264 and 265 applicable to generators that manage waste on-site will take effect twelve months from today.

It should be noted that the HSWA specifically states that the requirements of this Section should not be construed to be determinative of the requirements appropriate for small quantity generators in developing a regulatory program. The hammer provisions of HSWA, therefore, do not dictate the content of these final rules for generators of 100-1000 kg/mo.

4. August 1, 1985 Proposal

On August 1, 1985, EPA proposed rules that would apply to generators of 100-1000 kg/mo of hazardous waste. The proposed rules represented the Agency's efforts to balance the need for regulation of this group of generators in a manner that would protect human health and the environment with the need to minimize the impacts of such regulation on small firms.

The proposed rules modified the existing standards for generators and treatment, storage, and disposal facilities to reflect the generally smaller quantities of waste and small business nature of many of these firms. In essence, EPA concluded that some relief from the administrative and paperwork requirements embodied in the Part 262 Generator Standards was appropriate for generators of 100-1000 kg/mo of hazardous waste.

EPA proposed to remove 100-1000 kg/mo generators from the existing § 261.5 small quantity generator provision, thus subjecting them to Part 262. In addition, the Agency proposed specific amendments to Part 262 to relieve these generators of some of the requirements of that Part. Under the proposed rules, generators of 100-1000 kg/mo would have been required under Part 262 to:

- Determine whether their wastes are hazardous (already required under § 261.5);
- Obtain an EPA identification number;
- Store hazardous waste on-site for no more than 180 or 270 days in compliance with specially modified storage standards (unless they comply with the full regulations for hazardous waste management facilities);
- Offer their wastes only to transporters and facilities with an EPA identification number;
- Comply with applicable Department of Transportation (DOT) requirements for shipping wastes off-site;
- Use a single copy of the Uniform Hazardous Waste Manifest to

accompany the waste from the generation site.

The proposed requirements for generators of 100-1000 kg/mo were intended to be less stringent than those applicable to large quantity generators in two significant respects. First, under the proposed rules, generators of 100-1000 kg/mo would not have been required to comply with the full manifest system required of larger hazardous waste generators that ship waste off-site for treatment, storage, or disposal. Instead, the Agency proposed a "single copy" manifest system intended to serve as a "notification" to subsequent handlers of the waste (*i.e.*, transporters and facilities) that the material is a hazardous waste and to provide essential information to those handlers as well as emergency personnel. EPA proposed to specifically exempt these generators from the existing manifest requirements pertaining to number and distribution of manifest copies as well as from the recordkeeping and reporting requirements associated with the full manifest system (*i.e.*, use and retention of manifest copies and exception and biennial reporting). EPA also proposed to exempt 100-1000 kg/mo generators from all of the manifest requirements under certain circumstances where the waste is reclaimed under contractual arrangements where either the generator or a reclaimer retains ownership of the material throughout the generation, transportation, and reclamation of the waste. Under such circumstances, EPA believed that the manifest would be unnecessary, provided that specific conditions are met.

A second significant difference for 100-1000 kg/mo generators was the proposed requirements affecting accumulation (*i.e.*, short-term storage) of hazardous waste on-site prior to shipment of waste off-site or management on-site in a treatment, storage, or disposal facility. The proposed rules implemented the statutory requirement to allow generators of 100-1000 kg/mo to accumulate (*i.e.*, store) waste on-site in tanks or containers for up to 180 days (or 270 days if they must ship their waste over 200 miles for treatment or disposal), without obtaining interim status or a permit. In addition, the proposed rules provided that these generators would need to comply with specific storage requirements which were reduced somewhat from those applicable to large quantity generators. Unlike large quantity generators, those producing between 100-1000 kg/mo would not be required to prepare a written contingency plan or have

formalized personnel training programs. They would, however, be subject to a reduced set of specific requirements for contingency and emergency procedures, and for ensuring that their employees are fully cognizant of those procedures as well as proper hazardous waste handling methods. Generators of 100–1000 kg/mo that accumulate wastes in tanks or containers would, however, be subject to the same requirements of existing Subparts I and J of Part 265 applicable to larger generators as well as to the preparedness and prevention standards contained in Subpart C of Part 265.

EPA also proposed that those 100–1000 kg/mo generators who treat, store, or dispose of their hazardous waste in on-site facilities and who do not qualify for the 180- or 270-day exclusion would be subject to the full set of Parts 264 and 265 facility standards currently applicable to other hazardous waste treatment, storage, and disposal facilities, including the need to obtain interim status and a RCRA permit. EPA saw no basis for reducing the technical standards for these generators since the potential hazards to human health and the environment appeared to be equivalent to those from other fully regulated treatment, storage, and disposal facilities. However, because of the major impact which these facility requirements would be likely to have on many of these firms, the Agency proposed to delay the effective date of this portion of the regulations an additional six months (*i.e.*, 1 year from the date of publication in the *Federal Register* of the final rules) to allow these firms additional time to either arrange for off-site management or to up-grade their on-site practices for compliance with the full set of Parts 264 and 265 facility standards.

B. Summary of Final Rule

Today's final rule adopts most of the provisions of the proposed rules for generators of 100–1000 kg/mo. Today's final rule subjects generators of 100–1000 kg/mo to regulation under Parts 262, 263, 264, 265, and 266 of the hazardous waste regulations by removing these generators from the conditional exclusion provisions of § 261.5. However, the Agency has decided not to formally redefine a "small quantity generator" as one who generates no more than 100 kg of non-acutely hazardous waste since the Agency has concluded that such a redefinition would increase, rather than reduce, confusion. Consequently, the term "small quantity generator" will continue to apply to all generators of

less than 1000 kg of hazardous waste in a calendar month.

As a result of today's final rule subjecting generators of 100–1000 kg/mo to the Part 262 requirements, these generators will be required to:

- Determine whether their wastes are hazardous (already required under § 261.5);
- Obtain an EPA identification number;
- Store hazardous waste on-site for no more than 180 or 270 days in compliance with specially modified storage standards (unless they comply with the full regulations for hazardous waste management facilities);
- Offer their wastes only to transporters and facilities with an EPA identification number;
- Comply with applicable Department of Transportation (DOT) requirements for shipping wastes off-site;
- Use a multi-part "round-trip" Uniform Hazardous Waste Manifest to accompany the waste to its final destination; and
- Maintain copies of manifests for three years;

EPA is today finalizing a number of the proposed modifications to the Part 262 requirements applicable to generators of 100–1000 kg/mo. These generators will not be required to submit biennial reports or file exception reports if a copy of the manifest is not returned by the destination facility. In addition, the proposed modifications to the accumulation provisions of § 262.34 exempting these generators from the requirements to prepare a formal contingency plan and conduct formal personnel training are also being finalized, as is the proposed exemption from all manifest requirements for wastes reclaimed under certain contractual arrangements. The Agency is also exempting 100–1000 kg/mo generators from the 50' buffer zone requirements for container storage of ignitable or reactive wastes during periods of on-site accumulation.

The most significant departure from the proposed rules is the Agency's determination that the multiple copy manifest system does not impose a significant burden and that, in fact, the multiple copy manifest system is essential to ensure protection of human health and the environment. Therefore, the modifications to the existing manifest system proposed for 100–1000 kg/mo generators are not being adopted in today's final rule. The reasons for this change are discussed in detail in Unit III.C. of this preamble.

III. Response to Comments and Analysis of Issues

This Section of the preamble addresses the comments received on the August 1, 1985, proposed rules ("Proposal") and describes the Agency's position on the major issues raised in the proposal and during the comment period.

A. EPA's Approach To Regulating 100–1000 kg/mo Hazardous Waste Generators

As discussed in the preamble to the Proposal, EPA's approach in developing standards for 100–1000 kg/mo generators was one of balancing the two competing goals inherent in section 3001(d)—protecting human health and the environment and avoiding unreasonable burdens on the large number of small businesses affected by the standards. In assuring protection of human health and the environment, the Agency deemed it appropriate and consistent with Congressional intent to consider the "relative risk" posed by the small aggregate amounts of waste generated by the 100–1000 kg/mo generators. Given the lower relative risk that these generators pose compared to larger generators in terms of quantity of waste, varying the standards from those applicable to large quantity generators would still assure protection of human health and the environment.

EPA also evaluated the potential impact of full Subtitle C regulations with respect to both administrative and technical considerations, and concluded that the technical requirements were more essential than the administrative requirements to the general goal of protecting human health and the environment because they are directly concerned with controlling releases to the environment. In addition, Congress anticipated reducing administrative requirements, such as reporting and recordkeeping, as a means to reduce impacts on the 100–1000 kg/mo generators. Thus, EPA proposed to relieve these generators of some Part 262 standards that are administrative in nature while retaining all existing technical standards. The relief was only provided to generators who accumulate on-site for the statutorily-prescribed periods, because, given that the amount of waste accumulated would necessarily be limited, the relative risk from releases of such waste would be less than that from the unlimited amounts of waste accumulated by off-site facilities.

Most persons who commented on EPA's approach to regulation in this area supported the concept of reducing

burdens on small businesses and of fashioning the degree of relief provided from the level of risk involved; however, several commenters disagreed on the level of risk posed by waste from 100–1000 kg/mo generators. One commenter argued that the “relative risk” approach was not technically sound because the synergistic and antagonistic properties of waste streams were not considered, and mismanagement of even small quantities of waste, if not controlled or regulated, would eventually have the same impact as larger amounts of waste. One commenter pointed out that the relative risk approach is difficult to justify on a regional or local basis, where 100–1000 kg generators may contribute much more than the 0.3 percent nationwide contribution, and their proximity to populations as compared to large quantity generators should have been considered. Several commenters also asserted that Congress has judged the hazardousness of a given waste to be imparted by its inherent properties, not by its quantity.

As EPA explained in the Proposal, the Agency believes it to be both appropriate and consistent with Congressional intent to consider the relative risk posed by the smaller quantities of waste generated by 100–1000 kg/mo generators. Although it did evaluate several Congressionally-specified factors, such as waste characteristics, the Agency found that the only useful factor in drawing meaningful distinctions between large quantity generators and 100–1000 kg/mo generators was the quantity of waste generated. Thus, the Agency considered both the inherent properties and the quantities of waste generated in developing standards to assure protection of human health and the environment.

The Agency is aware that there can be concentrations of 100–1000 kg/mo generators in populated areas, and that their 0.3 percent nationwide contribution can be increased accordingly in some cases; however, overall the quantities of waste capable of being leaked or spilled during storage or transportation, as compared to that of large quantity generators, still poses relatively less risk. Moreover, the only type of relief being provided is where the technical standards deemed necessary to protect human health and the environment are not compromised in substance. The Agency believes that, by retaining all technical standards for storage, transportation, and treatment required of large quantity generators and by modifying some requirements of an administrative nature for the 100–1000

kg/mo generators, a fair balance between the goals of reducing burdens and protecting health and the environment is reached. The Agency does not believe that exempting the 100–1000 kg/mo generators from these administrative requirements will significantly increase the risks from storage, transportation, or disposal of the waste. In addition, as discussed below, the Agency’s decisions to require the multiple-copy manifest, which will allow “tracking” of the waste to ensure proper disposal, will further reduce any potential risks.

Another group of commenters criticized EPA’s approach in that it did not consider bases for providing relief in addition to that proposed. For example, several commenters asserted that 100–1000 kg/mo generators use less sophisticated waste management practices than large quantity generators, due in large part to economic constraints. This, along with the lesser relative risks, they asserted, dictates imposing less costly regulatory requirements, such as eliminating on-site storage permitting requirements for longer periods of time and larger quantities than EPA proposed.

While EPA did consider differences in waste management practices that would distinguish 100–1000 kg/mo generators from large quantity generators, it found that both classes use many of the same waste management practices (see 50 *FR* 31285 (Col. 1) (August 1, 1985)). The comments received on this subject do not provide evidence indicating otherwise. The Agency has recognized that the 100–1000 kg/mo generators generally have less manpower and fewer economic resources available to them, and that this would affect their ability to comply with the full regulatory requirements applicable to large quantity generators. However, Congress has already provided for on-site storage for longer periods of time to allow for more economical shipments. In addition, as discussed below, EPA is modifying certain facility requirements for on-site accumulation to simplify the requirements for contingency plans, emergency procedures, and personnel training (contained in Part 265, Subpart D and § 265.16). These requirements are being modified because they would be unduly burdensome and the underlying environmental objectives can be achieved in their modified form. However, full Parts 264–265 requirements would apply to generators that store their waste in tanks or containers for very long periods of time (*i.e.*, longer than 180 or 270 days) because the quantity of waste present,

over time, becomes significant. Similarly, the potential for release of hazardous waste to the environment becomes significant where 100–1000 kg/mo generators engage in waste management in surface impoundments, waste piles, landfills, or land treatment facilities. Thus, in order to fulfill its mandate to protect human health and the environment, EPA has rejected any suggestions to reduce the Parts 264 and 265 facility standards.

B. Applicability Issues

1. Definition of “Small Quantity Generator”

In the August 1, 1985 proposal, EPA proposed to amend 40 CFR 261.5 to redefine a small quantity generator as one who generates no more than specified quantities of acutely hazardous waste and no more than 100 kg of other hazardous waste in a calendar month. The effect of the proposed redefinition would have been to remove 100–1000 kg/mo generators from the § 261.5 exemption for small quantity generators and subject them, instead, to Parts 262–266, 270, and 124 of the hazardous waste regulatory program. Under the proposed rules, generators of 100–1000 kg/mo would have been one of two classes of large quantity generator. The Agency also proposed changes to Part 262 that would specifically exempt these 100–1000 kg/mo generators from a number of the otherwise applicable administrative requirements.

A number of commenters expressed concern about the proposed redefinition of the small quantity generator provision to exclude generators of 100–1000 kg/mo. In particular, they stated that many of these generators were only now becoming aware of their status as regulated hazardous waste generators and that, for the most part, they recognized themselves as “small quantity generators”. Changing these generators to large quantity generators, it was felt, would add to confusion and reduce the likelihood of compliance. It was also pointed out that many of the education materials being used to acquaint these generators with the RCRA requirements, including many of EPA’s own materials, referred to this class of generator as “small quantity generators”. Commenters suggested several specific labels to differentiate the various classes of generators, including such terms as “small *de minimis*”, “very small quantity generators” or “extremely small quantity generators”.

In proposing to remove the 100-1000 kg/mo generators from § 261.5, the Agency was attempting to address the complexity and confusion caused by having multiple classes of small quantity generator subject to significantly different standards. The Agency is sympathetic to the concerns of these commenters and in no way intended the redefinition to add to the confusion which many of these firms may experience in becoming subject to the bulk of the RCRA regulatory program for the first time. For the reasons discussed below, EPA has decided not to alter the existing definition of "small quantity generator" but is making modifications to § 261.5 that will provide a more explicit labeling scheme for regulatory purposes.

Section 261.5 has historically addressed those hazardous waste generators that were conditionally exempt from most of the hazardous waste regulatory program. Until the HSWA of 1984 and the subsequent codification of its early enactment provisions on July 15, 1985, only two major classes of small quantity generator existed: those generating or accumulating acutely hazardous wastes below certain quantity cutoffs and those generating or accumulating below 1000 kg of most hazardous wastes. Furthermore, both classes were largely exempt from the standards applicable to large quantity generators.

However, with the addition of a new class of small quantity generator designated by Section 3001(d) of HSWA (*i.e.*, those generating between 100 kg and 1000 kg of hazardous waste in a calendar month) that would be subject to most of the standards applicable to large quantity generators, continued use of the term "small quantity generator" would have no regulatory significance and would lead to confusion for the previously exempt class of generators.

The proposed redefinition was intended to distinguish between small quantity generators that were conditionally exempt from regulation under § 261.5 (*i.e.*, <100 kg/mo) and those that would be subject to most of the requirements applicable to large quantity generators (*i.e.*, 100-1000 kg/mo). By removing the 100-1000 kg/mo generator from § 261.5 and referring to these generators by their actual quantity limitations, the Agency intended to provide a more explicit, and therefore less confusing, regulatory scheme.

The Agency does not believe that the commenters' suggestion of retaining the term "small quantity generator" solely for 100-1000 kg/mo generators or creating new labels for different categories of small quantity generators

will reduce confusion; such labels would probably cause more confusion, especially where states have established their own small quantity generator definitions and exclusion levels. In fact, as a result of these comments, the Agency believes that the term small quantity generator is no longer sufficiently precise for most regulatory purposes.

For this reason, the Agency is making three regulatory changes affecting the use of the term "small quantity generator". First, the Agency is adding a definition of "small quantity generator" to Section 260.10 as follows:

"Small quantity generator" means a generator who generates less than 1000 kg of hazardous waste in a calendar month.

This definition *conforms to the existing definition of the term* and is being added to § 260.10 to alleviate any potential confusion over the definition of "small quantity generator".

Second, EPA is finalizing the proposed removal of generators of 100-1000 kg/mo from the conditional exclusion provisions of § 261.5 and will instead refer to these generators in the regulatory language as generators of 100-1000 kg/mo. This will retain the original premise of the redefinition which was to segregate in the regulations those generators that are predominantly exempt from regulation (*i.e.* generators of less than 100 kg/mo of hazardous waste and generators of acutely hazardous waste in less than specified quantities) from those who are more fully regulated (*i.e.* 100-1000 kg/mo generators). Since the 100-1000 kg/mo generators are no longer excluded from most of the Part 262 regulations by inclusion in § 261.5, the applicable portions of Parts 262-266, 270, and 124 will apply to these generators, as proposed.

Finally, the Agency is also modifying references to the term "small quantity generator" in § 261.5 and in other parts of the regulations to provide more explicit descriptions of the various classes of small quantity generator. Thus, generators of less than 100 kg/mo of hazardous waste or less than specified quantities of acutely hazardous waste will also be referred to by their quantity cutoffs or as generators who are conditionally exempt under Section 261.5. Section 261.5 will now be titled "Special Requirements for Hazardous Wastes Generated by Conditionally Exempt Small Quantity Generators."

The removal of the term "small quantity generator" from most regulatory use will in no way preclude continued use of the term "small

quantity generator" for general reference and educational purposes. The Agency recognizes the widespread use of the term "small quantity generator" by States, trade associations, Congress and others and has no intention of interfering with the continued use of that term by anyone choosing to use it to refer to the broad class generating less than 1000 kg in a calendar month. EPA will also continue to use the term "small quantity generator" in describing the collective group of generators below 1000 kg/mo but will use the terms "generators of less than 100 kg/mo" and "100-1000 kg/mo generator" for regulatory purposes. For example, in discussing methodology for counting quantities in order to determine generator status, it would be appropriate to refer to the small quantity generator class since it includes both the 100-1000 kg/mo generators and generators of less than 100 kg/mo.

2. Generator Category Determination

In the Proposal, the Agency discussed a number of issues relevant to making a determination of which generator category a given firm belonged to at any given point in time in order to determine what requirements that establishment was actually subject to. Among the issues covered were which wastes need not be included in quantity determinations (*e.g.*, spent lead-acid batteries destined for reclamation and used oil) and how to count wastes for purposes of determining generator status (*e.g.*, counting of wastes reclaimed on-site). The comments received on these proposed rules raised a variety of additional issues with respect to what types of activities and wastes were intended to be covered by the proposed rules, and whether the rules were applicable to "episodic generators" who might be fully regulated in one month but conditionally exempt the next. These issues are discussed below. In addition to the explanation provided in this preamble, the Agency intends to develop detailed, plain-English guidance and education materials to help the 100-1000 kg/mo generators understand and comply with the hazardous waste regulations.

a. Counting Amendment to § 261.5: In an effort to help clarify for small hazardous waste generators which wastes must be counted in determining their generator category, the Agency proposed an amendment to § 261.5.

The proposed amendment stated that for purposes of making quantity determinations under § 261.5, a generator need not count wastes which are specifically exempted from

regulation (see, e.g., § 261.4, or § 264.1(g) (2), (4), (5) and (6)) or which were not subject to substantive regulation under Parts 263, 264, 265, and the on-site accumulation provisions of § 262.34 were not subject to counting for purposes of determining generator status. Wastes that were subject to the provisions of § 261.6 (b) and (c) (recyclable materials), however, would be required to be counted in making quantity determinations. The proposal was designed to ensure that wastes that are not regulated are not counted. In addition, the counting amendment was intended to eliminate the multiple counting of wastes that are reclaimed and then reused many times during the calendar month. In this situation, the waste would only be counted once, even though it is reused and subsequently becomes a hazardous waste again after such reuse.

While the proposed amendment was intended to make it clear that any hazardous waste that is excluded or exempted from substantive regulation need not be included in the quantity determinations, a number of commenters either misunderstood the scope of the amendment or believed that additional clarification was necessary for the amendment to be understood. Although virtually all commenters on the proposed amendment supported the concept, several recommended specific changes to improve the clarity of the provision. Consequently, the Agency is today finalizing a slightly modified version of the amendment to § 261.5 to clarify which wastes are counted in making generator category determinations.

One commenter correctly noted that the amendment, as written, would not apply to generators of 100–1000 kg/mo since the amendment referred only to the quantity determinations under § 261.5. Since, under the rules being promulgated today, 100–1000 kg/mo generators will no longer be subject to the conditional exclusion provisions of § 261.5, the counting amendment would not have applied to these generators as proposed. Since this was contrary to the Agency's intent that the § 261.5(c) amendment be used by all generators in determining their generator status, the final regulatory language of this provision is modified to indicate that the amendment applies to quantity determinations under Parts 261–266 and 270 of the hazardous waste rules.

A second modification to this provision will make it clear that wastes which are not regulated under Parts 262–266 and 270 are not counted in making quantity determinations.

The majority of commenters on this provision asked for clarification on which wastes or processes were actually intended to be exempted from counting since the references to broad regulatory provisions or concepts such as "subject to substantive regulations" left many readers uncertain as to what the Agency considered to be "substantive regulation". For purposes of this provision, the term "substantive regulation" includes regulations which are directly related to the storage, transportation, treatment, or disposal of hazardous wastes. Regulations which would not be considered "substantive" for purposes of this provision would be requirements to notify and obtain an EPA identification number or to file a biennial report.

As a general guide, the following materials are included in the general category of exempted or excluded wastes that would not be counted in making quantity determinations for purposes of determining hazardous waste generator status:

- Any waste excluded from regulation under § 261.4. For example, wastes discharged to publicly owned treatment works (POTWs) and commingled with domestic sewage are not considered to be solid wastes when discharged, under § 261.4(a). Therefore, they are excluded from regulation under Subtitle C of RCRA and not counted for purposes of making quantity determinations (unless they are stored or treated in regulated units prior to being discharged). Such wastes are regulated instead under the Clean Water Act.²

- Any waste exempt from regulation under § 261.6 or wastes that are not stored or transported prior to being reclaimed. For example, under § 261.6(a)(3)(ii), spent lead-acid batteries that are returned to a battery manufacturer for regeneration are exempt from regulation under Parts 262–266, 270, and 124, and, therefore, are not counted in the quantity determination.

Also, used oil exhibiting a characteristic of hazardous waste, unless mixed with other hazardous wastes, is also currently exempt under § 261.6(a) and is not counted for purposes of making quantity determinations. EPA recently proposed to list used oil as a hazardous waste and

² Waste discharged to a public sewer system is exempted from RCRA to avoid duplicative regulation since such wastes are regulated under the Clean Water Act. While disposal of hazardous wastes in this manner is not a violation of RCRA, the general pretreatment standards under the Clean Water Act contained in 40 CFR 403.5 prohibit the introduction of wastes into POTWs that would interfere with the operation of the treatment plant or subsequent POTW sludge management.

proposed special management standards for used oil that is recycled. (See 50 FR 49164, November 29, 1985.) These proposals, if finalized, will continue to exclude used oil from the quantity determinations of Parts 261–266 and 270. Under the proposed rules for used oil, generators would count their used oil separately from their other hazardous wastes against a separate small quantity generator cutoff that would be established for recycled oil. Under those proposed rules, generators would be subject to less stringent standards for their recycled used oil than for their other hazardous wastes, provided they do not mix other hazardous wastes with their used oils or dispose of the used oil rather than recycle it. Used oil which is disposed of, or mixed with other hazardous wastes, would be regulated like any other hazardous waste and counted separately against the 100 kg/mo cutoff being promulgated today for other hazardous waste generators.

- Any waste reclaimed on-site if it is not accumulated prior to recycling in such a way as to become subject to the accumulation provisions of § 262.34 or the permitting requirements for storage facilities under Parts 264 or 265 (i.e. if it is not accumulated or stored prior to reclamation on-site). Under the hazardous waste rules, the actual process of reclaiming wastes is not subject to regulation under Parts 262–265 and 270 and 124 of the hazardous waste regulations.

Only the accumulation, transportation, long term storage, or the management of residues or sludges resulting from the reclamation process are actually subject to regulation. For example, wastes which are continuously reclaimed in a still or solvent cleaning machine on-site without intervening storage and which are reused on-site are not regulated and are not required to be counted in determining generator status.

- Wastes exempt from regulation under §§ 264.1 or 265.1, provided they are also not subject to the substantive standards in 40 CFR Parts 262 and 263. For example, wastes treated in elementary neutralization units, wastewater treatment units or totally enclosed treatment facilities as these units are defined in §260.10 are exempt from regulation under Parts 264 and 265.

- Wastes exempt from certain regulations under § 261.4(c). For example, wastes stored in a product or raw material storage tank are not subject to regulation under Parts 262–265, 270, 271, and 124, or to the RCRA 3010 notification requirements, and hence, are not counted.

Therefore, generators are required to count for purposes of determining generator status any waste that is subject to the substantive regulations. Wastes are only counted once, however. A number of commenters claimed that although EPA discussed this in the preamble to the proposed rules, this point was not made clear in the actual regulatory language. The Agency agrees, and thus has added § 261.5(d)(3) to make it clear that a generator need not count the hazardous waste generated and then reclaimed and reused at the site of generation if the hazardous waste has already been included in the monthly totals. The Agency also is modifying § 261.5(d)(2) to make it clear that you only count the residue from treatment where the original hazardous waste was not counted.

The following examples may help to illustrate the regulatory scheme:

(Example 1) Manufacturer A uses solvent in a degreasing process yielding 500 kg of spent solvent in a month. If the solvent is to be reclaimed (e.g., distilled) on-site and is not sorted or accumulated prior to reclamation, it will qualify as a solid (and hazardous) waste but it will not be counted in the generator's monthly totals. The 90 kg of still bottoms from the distillation process are also hazardous waste and must be counted since they were not included in the monthly total. Consequently, 'A' will not be a generator of 100-1000 kg during the month in question.

If the solvent is stored or accumulated prior to distillation, the 500 kg of the spent solvent will qualify as a hazardous waste and will be counted in 'A's hazardous waste totals for the month in which it was generated. The still bottoms will also qualify as hazardous waste, but will not be counted because the spent solvents have already been counted once. The regenerated solvent, on the other hand, will not be a solid or hazardous waste. It will remain unregulated, just like the virgin material.

(Example 2) Manufacturer A generates 120 kg of hazardous spent solvent in one month which he distills without intervening storage. The regenerated solvent is then reused. Neither the spent solvent nor the regenerated solvent is counted and "A" is not a 100-1000 kg/mo generator. Alternatively, "A" distills the spent solvent, but stores it for less than 180 days before reclamation, and reuses the regenerated solvent until spent again, and then distills it once again. The spent solvent would be counted because it was stored before reclamation, but it would only be counted once. "A" is now a 100-1000 kg/mo generator. If the spent

solvent were stored for more than 180 days before reclamation, "A" would need a storage permit.

(Example 3) "A" generates 500 kg of hazardous spent solvent in one month and stores it in an earthen basin which is an impoundment, not a tank. The spent solvent is then discharged to a POTW. "A" must count the total quantity of spent solvent, as the impoundment is not a wastewater treatment unit by definition (§ 260.10), and hence, "A" is a 100-1000 kg/mo generator.

(Example 4) An automotive services center generates spent lead-acid batteries, which it sends to a battery breaker. The service center does not count the spent batteries in its monthly total because they are exempt from regulation until they reach the battery breaker. (See § 266.80(a).)

b. Generators of Acutely Hazardous Waste: Section 3001(d)(7) of HSWA states that the requirements applicable to generators of acute hazardous waste listed in §§ 261.31, 261.32, or 261.33(e) are not affected by the HSWA amendments.³ Thus, today's regulatory amendments will not alter those requirements applicable to generators of acutely hazardous wastes and these generators will remain subject to the exclusion limits and requirements contained in § 261.5(e). The same counting rules as those described above are applicable.

c. Generators of Non-acutely Hazardous Waste in Quantities of Less than 100 kg/mo: Section 3001 of HSWA gives EPA authority to promulgate regulations for generators of less than 100 kg of hazardous waste per month if the Administrator determines that such standards are necessary to protect human health and the environment. The Agency is not required to promulgate such regulations and it did not propose to further extend coverage of the hazardous waste program to this class of hazardous waste generator in the August 1, 1985 proposal.

In the Proposal, the Agency stated that it had no data to indicate that additional regulation of generators of less than 100 kg/mo of non-acutely hazardous waste would provide any significant additional level of environmental protection. Generators of less than 100 kg/mo of hazardous waste account for only .07 percent of the total quantity of hazardous waste generated nationally. A review of damage cases also indicated that very few incidents involved quantities below 100 kg. Consequently, none of the regulations

³ At this time, only one acute hazardous waste, dioxin, is listed outside of § 261.33(e).

promulgated today, with one exception, alter the existing § 261.5 provisions applicable to generators of less than 100 kg/mo. As discussed under the on-site accumulation provisions later in this preamble, the Agency has decided to modify § 261.5(g) to subject generators of less than 100 kg/mo who exceed the accumulation limit of 1000 kg to the modified standards for generators of 100-1000 kg/mo rather than to full regulation.

d. Determination of Generator Status: A number of commenters asked for clarification of the requirements that would apply to generators that do not generate hazardous waste at a uniform rate. Such "episodic generators" may generate, for example, less than 100 kg of hazardous waste one month, quantities of 100-1000 kg other months, or may periodically exceed 1000 kg in a single month.

Several commenters requested clarification of what standards would apply to these episodic generators under different circumstances. Various circumstances for which clarification was requested were raised; for example:

(1) A generator that exceeds the 100 kg/mo exclusion level periodically as a result of special operations such as tank cleaning;

(2) A generator that usually generates between 100 and 1000 kg/mo, but exceeds 1000 kg in one month;

(3) A generator that exceeds 1000 kg/mo several times and accumulates all waste in a single tank;

(4) A generator that periodically exceeds 1000 kg/mo and separates the "under 1000 kg/mo" waste from the "over 1000 kg/mo" waste.

The Agency has always taken the position that a generator may be subjected to different standards at different times, depending upon his generation rate in a given calendar month (See, e.g., 45 FR 76620, November 19, 1980). Thus, a generator of less than 100 kg in one calendar month would be deemed a conditionally exempt generator in that month, subject only to the requirements of § 261.5; however, if in the next calendar month, he generates more than 100 kg but less than 1000 kg of any regulated hazardous waste, he is subject to all of the standards being promulgated today, as his generator status has changed. Furthermore, if he generates more than 1000 kg in any calendar month, he is deemed to be a large quantity generator, subject to all applicable standards. Thus, any non-exempts waste that is generated during a calendar month in which the 1000 kg/mo cutoff is exceeded is subject to full regulation until it is removed from the

generator's site. If such fully regulated waste is mixed or combined with waste exempt or excluded from regulation or waste that is subject to reduced regulation under today's final rule, then all of the waste is subject to full regulation until the total mixture is removed from the generator's site. If, on the other hand, the generator stores separately that waste generated during a month in which less than 1000 kg (but more than 100 kg) of hazardous waste is generated, from waste generated during a month in which more than 1000 kg is generated, the former is subject to today's reduced requirements, while the latter is subject to full regulation.

Therefore, generators who expect to periodically exceed the 1000 kg/mo cutoff for the reduced requirements being promulgated today should be prepared to ship their waste off-site if they wish to avoid being subject to full regulation.

Several commenters have suggested alternative schemes for determining applicable standards, all of which the Agency must reject. One commenter suggested that generators would determine their generator status on the basis of a "moving average" over a 12 month period. If, for example, a generator exceeded 1000 kg/mo for several months but averaged between 100 and 1000 kg over the course of the year, he would be subject to the reduced standards being promulgated today for 100-1000 kg/mo generators. The major problem with this approach is that generators would not be able to determine what standards they were subject to until as much as a year after they should have been complying with a specific set of requirements. For example, a generator who generates over 1000 kg the first month but who expects his moving average to fall below 1000 kg after 12 months could avoid preparing a contingency plan or complying with the other requirements of Part 262 applicable to large generators. This would also present enforcement problems, since it would be unclear which standards apply at any given point. Thus, the Agency believes that such an approach would not significantly reduce the implementation difficulties it was designed to address.

The second approach suggested was establishment of a uniform time and quantity cutoff for all generators, applying the same standards to the same quantities, regardless of monthly generation rates. Under this approach, all generators would be allowed to utilize the 180- and 270-day storage periods, provided the 6000 kg "cap" was not exceeded for all accumulated

hazardous wastes so that the reduced standards of Part 262 for 100-1000 kg/mo generators would be extended to all generators who do not exceed 6000 kg on-site.

While this approach would be simpler to administer, it would be inconsistent with the approach that Congress has directed the Agency to take in developing standards for generators who produce different quantities of waste. While the Agency is authorized to consider such factors as small business impacts and management capabilities for 100-1000 kg/mo generators, it is not explicitly authorized to do so for larger generators. The Agency may not ignore in this rulemaking the fact that the statute has established generation rate as a factor in determining whether business impacts may be considered. Thus, as discussed further in Unit III.C.4., below, the Agency may not extend to all generators the same time and quantity limitations applicable to 100-1000 kg/mo generators.

C. Part 262 Generator Responsibilities

EPA is today finalizing amendments to Section 261.5 that will subject hazardous waste generators of 100-1000 kg/mo to the Part 262 generator standards and simplify a number of those requirements. This section of the preamble discusses the proposed amendments to Part 262 to relieve 100-1000 kg/mo generators of some of the administrative burden of complying with the hazardous waste regulatory program, the comments received on each proposal and the Agency's decision with respect to each of the proposed amendments.

The specific Part 262 requirements that EPA is amending for application to 100-1000 kg/mo generators are as follows:

- § 262.20 (General Manifest Requirements) is amended to exempt generators of 100-1000 kg/mo from all manifest requirements if their hazardous waste is reclaimed under certain contractual agreements provided the generator complies with specific recordkeeping requirements set forth in this section. Some modifications to this amendment are being made in response to comments.

- § 262.34 (Accumulation Time) is amended to extend the period of on-site storage allowed for 100-1000 kg/mo generators without the need to obtain interim status or a RCRA permit from 90 days to 180 (or 270) days for quantities not to exceed 6000 kg. In addition, § 262.34 is amended to specify the requirements that would apply to such on-site storage by these generators.

- A new § 262.44 to Subpart D of Part 262 is added to exempt generators of 100-1000 kg/mo from the requirements to file and maintain records of biennial and exception reports. This exemption does not apply to records pertaining to hazardous waste determinations under § 262.40(d) and the extension of retention periods under § 262.40(c).

1. Notification and Identification Number Requirements—§ 262.12

In the August 1 proposal, EPA proposed that generators of 100-1000 kg/mo be subject to § 262.12, which provides that generators not excluded under § 262.10 or the provisions of § 261.5: (1) Must not treat, store, dispose of, transport, or offer for transportation, hazardous waste without receiving an EPA Identification Number; (2) must obtain an EPA identification number (and may do so by completing and submitting EPA form 8700-12); and (3) must not offer their hazardous waste to transporters or to treatment, storage, and disposal facilities that have not received an EPA identification number.

The majority of commenters on the requirement to obtain and use an EPA identification number supported the Agency's proposal not to exempt 100-1000 kg/mo generators from this provision. EPA believes that a centralized data base of firms subject to regulation under RCRA is essential for effective compliance monitoring and enforcement, as well as for characterizing the regulated community to provide information to Congress and to make resource projections. Use of a unique identifying number is necessary to effectively manage any large data base. Several commenters added that requiring identification numbers for all generators who are subject to substantial regulation minimizes confusion in the regulated community.

Commenters who opposed the requirement cited the Agency's cost estimate of \$40.00 per generator to obtain a U.S. EPA Identification Number, the complexity of the application form, and the lack of a specific statutory requirement for Identification Numbers. However, the Agency does not believe that the requirement to obtain a U.S. EPA Identification Number is overly burdensome to these generators, given the important function which this requirement fulfills.

Some commenters who opposed the requirement cited the complexity of the EPA Form 8700-12, "Notification of Hazardous Waste Activity." The Agency does not believe that the form is overly complex. EPA Regional Offices

have already received over 28,000 applications for U.S. EPA ID numbers from generators of less than 1000 kg/mo. In some cases, these applications were prompted by requirements from transporters and facilities that handle waste from these generators. In other cases, States require identification numbers for generators of less than 1000 kg/mo. While the Agency is unaware of any instances of 100-1000 kg/mo generators being unable to complete the form, EPA has initiated a major education program through trade associations, States, and grants to local governments and others, which would widely disseminate information that will help generators comply with today's rule. The Agency has also prepared a supplemental instruction sheet to provide additional information to generators of less than 1000 kg/mo who apply for U.S. EPA Identification Numbers. These instructions will contain the EPA waste codes for wastes commonly produced by these generators. This information will allow many generators to complete the application without additional information or research. In addition, generators may call the RCRA/Superfund Hotline or the Small Business Hotline for information and assistance. These numbers are provided at the beginning of today's notice.

Some commenters suggested establishing a telephone system for obtaining identification numbers. EPA considered this kind of system in the proposal and concluded that the lack of a signed record from the waste handler would allow a high potential for confusion and misrepresentation. The Agency still believes this to be true and no commenter was able to suggest a mechanism for avoiding this.

One commenter suggested that EPA modify the application form to require generators to indicate whether they generate less than 100 kg/mo, 100-1000 kg/mo, or more than 1000 kg/mo. EPA recently modified the form to require generators to indicate whether they generate more than 1000 kg/mo or less than 1000 kg/mo of hazardous wastes.

The Agency does not believe that there is any justification for exempting "infrequent generators" from the Identification Number requirement, as suggested by one commenter. EPA believes that all 100-1000 kg/mo generators should be known to the Agency, however infrequently they fit into the category, to allow follow-up if any problems arise. Also, use of an EPA Identification Number when wastes are shipped off-site helps enforcement

authorities to keep track of waste shipments.

The Agency believes that the EPA Identification Number requirement, as proposed, is the best system for ensuring that the Agency has adequate information about these new members of the regulated community. Consequently, EPA is not modifying § 262.12 for generators of 100-1000 kg/mo.

2. The Hazardous Waste Manifest System—Part 262, Subpart B

This Unit discusses the proposed modifications to the hazardous waste manifest system for 100-1000 kg/mo generators for wastes shipped off-site. The issues raised in the comments on the Proposal include the "single" versus "multiple" copy or "round-trip" manifest, the proposed exemption from manifesting for wastes shipped under certain reclamation agreements, and the applicability of the manifest waste minimization certification provisions of the HSWA.

a. Number of Copies and Use of the Manifest: The Proposal for generators of 100-1000 kg/mo of hazardous waste contained several modifications to the Uniform Hazardous Waste Manifest system. The proposed rules would have exempted 100-1000 kg/mo generators from the following requirements: 1) to compete a multiple copy manifest form (§ 262.22), 2) to retain a copy for the generators' records (§ 262.23(a)(3)), and 3) provide multiple copies of the manifest to the waste transporter (§ 262.23(b)). The effect of these proposed modifications to the manifest system would have been to exempt these generators from the "roundtrip" or "tracking" function of the manifest system (*i.e.*, establishment of a paper trail for enforcement purposes) while continuing to require that a single copy of a fully completed manifest accompany the waste shipment as a means to provide notice to subsequent handlers that the waste is hazardous. No modifications were proposed to the requirements to fully complete the manifest form, and to use established systems for obtaining forms from the appropriate State, except for a proposed elimination of the manifest document number from the required information.

These modifications to the manifest system were intended to minimize impacts on small business while still meeting the underlying goal of HSWA to protect human health and the environment. By reducing some of the paperwork requirements associated with the full manifest system, EPA believed that both of those goals could be served. In particular, EPA believed

that the requirement for these generators to obtain an EPA identification number, complete a single copy of the manifest for all off-site shipments and for facilities to keep these manifests in its files created a significant legal obligation that the waste would be managed at approved hazardous waste management facilities, as required under the HSWA. The Agency believed that this legal obligation would not be significantly enhanced by requiring the use, distribution, and retention of multiple copies of the manifest form.

In requesting public comment on the issue of the "single copy" manifest system, EPA pointed out that it was not fully convinced that the relief being offered was significant enough to offset the potential confusion which the single copy system might cause, or to offset the loss of the "tracking" function of the manifest as an enforcement mechanism. EPA received extensive negative comment on the proposed amendments which have convinced the Agency that the multiple copy manifest system should be adopted in the final rules.

Many commenters asserted that exempting 100-1000 kg/mo generators from the "round-trip" hazardous waste manifest system (*i.e.* return of a signed copy by the designated facility to the generator as proof that the shipment arrived) would not significantly reduce administrative burden. Most commenters who represented both small and large businesses, State agencies and firms in the waste management industry believed that the information requested on the manifest was not particularly difficult to provide, and they did not object to the proposed requirements to provide essentially full manifest information. Many commenters argued that requiring full manifest information was appropriate for all generators, and that the preparation of multiple copies of the manifest presented no incremental burden over a single copy system since manifests are generally obtained in carbon sets, requiring no real additional effort. These commenters also pointed out that retention of a copy for the generator's files poses a minimal burden due to the limited number of shipments most 100-1000 kg/mo will need to make under the extended accumulation periods being promulgated today for these generators (See Unit III.C.4.). Given the limited number of shipments most generators will need to make to treatment or disposal facilities in a year (*i.e.* 2-4), commenters asserted that filing a manifest copy and replacing it with a copy signed and returned by the designated facility was simply not

burdensome. Furthermore, virtually all commenters, many of whom represented small business, also indicated that retention of a copy of the manifest containing signatures of the transporter and facility would be done in any case, and was essential to demonstrate that a business had met its legal responsibilities in cases where the waste is mishandled by subsequent handlers.

Another major concern of many commenters with respect to the single copy manifest system was the confusion that would result from having two different manifest systems in place for 100-1000 kg/mo generators and for generators of over 1000 kg. While some commenters representing small businesses believed that the single copy manifest system was workable and provided a real reduction in administrative burden, virtually all other members of the waste management and regulated community argued for a uniform manifest system. Many commenters representing larger corporations and firms with multiple facilities argued that a single uniform system would be the least confusing and least burdensome system. In addition, many commenters believed that different State and Federal requirements would make it extremely burdensome for many small businesses to determine which manifest system applied to them. States, waste haulers, and facilities would also have the added burden of trying to verify the generator status of those utilizing a single copy form and because of the difficulty in administering a dual system, they would simply require that all generators comply with the full system.

One commenter also argued that the Agency's proposed single copy manifest was inconsistent with Congressional intent since the hammer provisions of Section 3001(d)(8), which included a requirement for return of a signed manifest by the facility to the generator, were intended by Congress to serve as the minimum regulatory standards. However, the Agency can find no evidence in either the statute or the legislative history that would lead the Agency to this conclusion. The plain language of the hammer provision states ". . . nothing in this section shall be construed to be determinative of those standards appropriate for small quantity generators", and Section 3001(d)(6) explicitly sets out the "minimum" standards that must be included in the regulations. In addition, the legislative history of Section 3001(d) indicates that the provisions of subsection (d)(6) were to be regarded as statutory minimums

rather than the hammer provisions of subsection (d)(8). See S. Rep. No. 284, 98th Cong., 1st Sess. 11-12 (1983); H.R. Rep. No. 1133, 98th Cong. 2nd Sess. 101, 103-104 (1984). Thus, the statute and legislative history provide extensive evidence that Congress gave EPA broad authority to establish whatever standards it deemed appropriate for these generators, and to vary the hazardous waste standards to minimize burden, consistent with protection of human health and the environment.

A number of commenters raised concerns with respect to the ineffectiveness of the single copy manifest system in ensuring that waste shipments are properly tracked from generator to transporter to facility. Under the proposed manifest system, a generator would be required to complete a single copy of the manifest and to give it to the transporter who in turn would be required to sign it and turn it over to the designated facility upon delivery of the waste shipment. The Agency felt that this chain created a substantial legal obligation that the waste would be managed at a Subtitle C facility. However, a number of commenters asserted that such a system would serve only to encourage unscrupulous transporters to either alter manifest information or simply dump the waste illegally, since the generator or others do not have any record of his accepting the waste shipment. A number of States were concerned that the absence of multiple copies of the manifest in the records of the generator, transporter, and facility would completely eliminate the ability of EPA or the States to enforce the requirement that the waste be managed at Subtitle C facilities. Further, these commenters felt that, whether or not the Agency takes an aggressive enforcement posture with respect to 100-1000 kg/mo generators, the mere existence of the multiple signed copies of a manifest serve as an essential incentive to properly manage the waste.

The Agency finds persuasive the arguments presented by commenters that requiring only the single copy manifest does not offer significant regulatory relief. The Agency has also concluded, based on public comment, that the single copy system may be insufficient to meet the statutory mandate to promulgate rules for 100-1000 kg/mo generators which are sufficient to protect human health and the environment.

The difference in burden between a single copy of the manifest and a multiple copy of the manifest, both containing essentially full information,

appears to be negligible, so there is no real reduction in burden from the single copy system. Retention of a manifest copy by the generator is also minimally burdensome and is in the generator's best interest. The absence of a round-trip or multiple copy manifest could encourage, rather than protect against, mismanagement of these wastes. Most importantly, requiring the generator to retain a copy for his records and provide multiple copies of the manifest to the transporter provides an essential incentive for all parties to fulfill their responsibilities under RCRA. Thus, the Agency has decided not to adopt the single-copy manifest system, as proposed.

Consequently, generators of 100-1000 kg/mo will be subject to all of the requirements of Subpart B of Part 262 with respect to the Uniform Hazardous Waste Manifest except for certain waste reclamation shipments as provided in Section 262.20, discussed below. In addition, these generators will be subject to the recordkeeping provisions of Subpart D of Part 262 with respect to manifest copies but will not be subject to the associated exception and biennial reporting requirements, as discussed in Unit III.C.3, below.

b. Manifest Exemption for Certain Reclamation Shipments: In the Proposal, EPA proposed to exempt generators of 100-1000 kg/mo from all of the manifest requirements of Part 262, Subpart B, provided the waste was reclaimed under certain specific conditions, including:

1. The generator would be required to have a written agreement with a recycling facility to collect and reclaim a specified waste and to deliver regenerated material back to the generator at a specified frequency;
2. The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator must be owned and operated by the reclaimer of the waste;
3. Either the generator or the reclaimer must retain title to the material at all times; and
4. The generator and transporter/reclaimer must comply with specific recordkeeping requirements.

Specific regulatory requirements which would have to be met in lieu of the manifest requirements were proposed as follows:

1. A copy of the reclamation agreement is kept in the files of both the reclaimer and the generator for a period of at least three years;
2. The reclaimer/transporter records (for example, on a log or shipping document) the following information (which would be required of

transporters in a proposed amendment to § 263.20):

- The name, address and EPA identification number of the generator;
- The quantity of waste accepted;
- All DOT required shipping information;

- The date the waste is accepted by the transporter;

3. The above record accompanies the waste as it is shipped from generator to recycling facility; and

4. The reclaimer/transporter keeps these records for at least three years.

In proposing this exemption, EPA indicated that such agreements satisfied the Agency's concerns that subsequent handlers of the waste would have sufficient notification and knowledge of the hazardous nature of the wastes being handled and that the wastes would be tracked properly from the generator to the reclaimer and would not be mismanaged. In addition, the Agency believed that such an exemption would encourage beneficial recycling activities and would avoid discouraging current operations of this nature by not imposing paperwork obligations that have no corresponding environmental benefit. The Agency requested comment on the proposed manifest exemption and sought comment on other situations that might warrant reduced manifest requirements.

While some commenters opposed the proposed manifest exemption as providing an opportunity for "sham recycling", most commenters suggested that the exemption be expanded to cover all recycling situations or to cover a broader scope of activity than that proposed. Some commenters felt that the narrow nature of the exemption would afford some segments of the recycling industry an unfair competitive advantage. One commenter suggested that the exemption apply to reclamation agreements with firms that collect wastes for recycling but do not reclaim the wastes at their own facility, but rather, ship them via a licensed hazardous waste hauler to a separately owned and operated reclamation facility. This commenter argued that the same degree of protection would be afforded under these circumstances as under the proposed system since the waste would still be transported and reclaimed at licensed or permitted facilities. Other commenters argued that the exemption should also apply to legitimate recycling situations where ownership of the material may in fact change hands, such as cases where reclaimed material is not returned to the original generator but is instead sold to a third party. One commenter argued that the mere existence of a contract

provides sufficient notice to subsequent handlers of the nature of the waste and that adequate economic incentives exist in any recycling situation to ensure proper management.

The proposed restrictions on applicability of the manifest exemption were intended to serve the same functions that the manifest system does. The most important of these, the "tracking" function of the manifest, must be replaced with adequate contractual relationships and commercial incentives if the exemption is to meet the test of protecting human health and the environment while reducing administrative burden.

The Agency has considered various ways in which to expand the applicability of the exemption, including those suggested by commenters, and has concluded that unless the following proposed restrictions are retained, the exemption would allow unscrupulous persons to easily avoid the hazardous waste management system:

First, the Agency believes that the requirement that the generator and reclaimer have a written agreement for collection and reclamation of a specified waste and for redelivery of regenerated material at a specified frequency is essential. Such an arrangement (usually called a "tolling" arrangement) provides tracking and accounting of waste in place of the manifest system in waste disposal situations. A simple reclamation contract without return of regenerated material to the generator would provide no tracking of the waste, since the generator would have no incentive to check on subsequent waste handling after he turns it over to the transporter or reclaimer. In addition, allowing the exemption in any contractual situation would make no distinction between recycling activities and off-site waste disposal activities, where normally there are also contractual obligations. Requiring return of regenerated material as part of the contractual relationship places the proper incentive on the reclaimer to actually reclaim material for delivery to the generator (otherwise he would be in breach of the contract) and on the generator to scrutinize the practices of the reclaimer. Unlike off-site waste disposal, the generator would have some vested economic interest in ensuring proper management of the waste.

Second, the Agency believes that the vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator must be owned and operated by the reclaimer. This requirement precludes third parties not bound by the

reclamation agreement (*i.e.*, independent transporters) from entering the closed loop created by the tolling arrangement. This is necessary to ensure that the waste is not mismanaged. Even if a generator were to ship his waste via a licensed hazardous waste hauler, he would have no assurance that the waste would actually be delivered to the reclamation facility with which he has contracted. In such a third-party transporter situation, where the transporter has no vested interest in proper handling and management of the waste, the Agency would deem it necessary to impose additional significant recordkeeping requirements on all handlers of the waste, and possibly impose additional requirements on the generator. This would defeat the purpose of the manifest exemption, and may even impose greater burden than the manifest itself.

Third, the proposed recordkeeping requirements are an essential ingredient to providing the "paper trail" no longer provided by the manifest system.

While the Agency originally considered the retention of ownership requirement to be another essential element due the vested interest it created (*i.e.*, continuing legal responsibility for the material), a second look at this requirement, in light of comments received, has convinced EPA that it is unnecessary. The requirements of tolling and that the reclaimer and transporter be the same entity appear to adequately address the same concerns underlying the ownership requirement. While the vested interest in proper management of the waste may be theoretically increased if ownership is retained by the reclaimer or generator, it does not appear to add significantly to the economic interest created by the tolling arrangement. In addition, the concern that third parties would break the chain between generator and reclaimer is addressed by the requirement that the reclaimer and transporter be one entity. Moreover, the retention of ownership requirement may result in needless restriction on the type of commercial arrangements allowed between generators and reclaimers (*e.g.*, where a reclaimer buys the waste from the generator and sells regenerated material back to the generator or to other parties). Therefore, the Agency is deleting the ownership requirement from the final rule.

A number of commenters suggested that the Agency be more explicit in the regulation with respect to the periods of retention of the contractual agreements and the transportation logs since the proposed rule did not specify when the

3-year recordkeeping period was to begin. Consequently, the Agency is modifying the regulatory language of this amendment to specify that a copy of the reclamation agreement must be kept in the generator and reclaimer/transporter's files for 3 years after the expiration of the agreement. A copy of the collection log or shipping paper for each shipment must be kept in the transporter's files for a period of 3 years after the date of the shipment.

Several commenters also requested clarification on the applicability of the proposed exemption to waste mixtures where most, but not all, of the constituents were reclaimed. In the specific example cited, the Agency was asked to clarify whether spent cartridge filters used in dry cleaning operations would qualify for the exemption, even though only a portion of the waste constituents are actually reclaimed. The Agency believes such waste mixtures should also qualify for the manifest exemption, provided that the other conditions of the exemption are met. There is no basis for distinguishing between, for example, bulk spent solvents that have impurities removed by a reclaimer, which impurities must be subsequently managed as hazardous waste, and waste constituents in a mixture that may not be reclaimed and must be disposed of as a hazardous waste by the reclaimer. In both cases, the manifest exemption for shipments to the reclaimer would not affect the responsibility of the reclaimer to properly manage the residues from the reclamation process.

Another commenter requested clarification on whether the requirement that reclaimed material be returned to the generator limited the exemption to those situations where the generator received back the *same* waste sent for reclamation. The requirement that the generator receive regenerated material back from the reclaimer was intended to ensure that the generator maintain a vested interest in ensuring that the reclamation facility was in fact engaged in bona fide recycling. However, the Agency recognizes that most reclamation is conducted through commingling of relatively small quantities of recyclable materials from a number of generators. The manifest exemption only requires that the generator receive regenerated material back from the reclaimer, not that it be the identical material as was shipped to the reclaimer. The only requirement for receiving regenerated material back is that it be of the *same type or product specification* as the material originally shipped for reclamation. While the

Agency recognizes that this requirement will limit the exemption to situations where the generator purchases reclaimed solvent from one source, we do not agree with those commenters who believe this provides an unfair competitive advantage to firms with reclamation facilities. While the manifest exemption may reduce the paperwork burden for some firms who have waste materials collected on a frequent basis, the Agency does not believe that it provides such a reduction in burden that companies qualifying for the exemption would be able to reduce costs significantly.

Other commenters asserted that the proposed exemption would be appropriate for generators of more than 1000 kg/mo who recycle their wastes under the same circumstances. While the Agency recognizes that some of the regulatory amendments being promulgated today for generators of 100-1000 kg/mo could be considered for larger generators, to do so would require extensive review of the existing hazardous waste management system and case-by-case determinations as to the appropriateness of specific requirements. Furthermore, the elements that the Agency must consider in adopting rules for small quantity generators, including the economic impacts of full regulation on small businesses, are not necessarily relevant to the rules applicable to larger quantity generators. Therefore, the Agency is promulgating the manifest exemption today only for 100-1000 kg/mo generators.

c. Waste Minimization: Under section 3002(b) of HSWA, all generators must certify on the manifest required under subsection (a)(5) that they have in place a program to reduce the volume or quantity and toxicity of the waste they generate to a degree determined by the generator to be economically practicable. Generators must also certify that their current method of management is the most practicable method available to minimize present and future threat to human health and the environment.

On July 15, 1985, EPA published a rule codifying a number of interim HSWA requirements (50 FR 28702). A revised Uniform Hazardous Waste Manifest Form (EPA Form 8700-22) was included in the Appendix to Part 262, and contained a revised certification statement incorporating the waste minimization provision. In the Codification Rule, EPA explained that the waste minimization provision did not apply to small quantity generators generating less than the quantities of

acutely hazardous waste specified in § 261.5 or to generators of less than 1000 kg of other hazardous waste, unless the generator accumulated quantities which exceeded 1000 kg, and thus became subject to Part 262. The waste minimization requirements were not applicable to these generators because section 3002(b) refers to "the manifest required by [section 3002] subsection (a)(5)" and the interim manifest provisions are imposed by section 3001(d), not 3002(a)(5). However, because section 3001(d) of RCRA requires EPA to establish standards for 100-1000 kg/mo generators under sections 3002, 3003, and 3004, the waste minimization certification requirements would apply to 100-1000 kg/mo generators upon promulgation of such standards. Since EPA did not propose to exempt 100-1000 kg/mo generators from the waste minimization certification requirements of section 3002(b) when it proposed rules for 100-1000 kg/mo generators on August 1, 1985, these generators would be required to certify compliance with the waste minimization provision when the standards under today's rule become effective.

EPA believes that requiring 100-1000 kg/mo generators to comply with the waste minimization certification provision imposes little or no additional administrative or technical burden and could, in fact, have real environmental benefit. However, since the Agency did not provide the public with an opportunity to comment on the appropriateness of this provision for 100-1000 kg/mo generators, EPA is publishing a separate notice elsewhere in today's **Federal Register** which explicitly requests comment on the potential burden which this requirement could impose on generators of 100-1000 kg/mo. The specific reasons for proposing to apply the waste minimization certification provision to these generators are described in detail in that notice. As noted in the other **Federal Register** notice, EPA will accept public comment on this provision for 30 days. If, after consideration of the comments, EPA determines that no exemption from the waste minimization certification requirement is warranted at this time, 100-1000 kg/mo generators will need to comply with the requirement by operation of law as of the date that the other Part 262 requirements take effect (*i.e.*, six months from today).

3. Recordkeeping and Reporting—Part 262, Subpart D:

In the proposed rules for generators of 100-1000 kg/mo, EPA attempted to

significantly reduce the recordkeeping and reporting burden on these generators, consistent with the statutory goals of protecting human health and the environment while reducing impacts on small business to the extent feasible. Specific proposed modifications to the recordkeeping and reporting requirements of Subpart D of Part 262 included:

- A proposed exemption from the recordkeeping requirements of § 262.40(a) for manifest retention and § 262.40(b) dealing with retention of Biennial and Exception Reports;
- A proposed exemption from the reporting requirements of § 262.41 (Biennial Reports) and § 262.42 (Exception Reports).

This section of the preamble addresses the comments received on these proposed modifications to recordkeeping and reporting requirements and the Agency's final decision in each of these areas.

a. Recordkeeping—§ 262.40: As noted in Unit III.C.2. of today's preamble, EPA received extensive comment on the proposed single copy manifest system which proposed to eliminate the need for retention of manifest copies as well as requirements for the use of a multiple copy manifest when shipping waste off-site. A large number of commenters were generally supportive of efforts to reduce recordkeeping requirements to the maximum extent feasible, and many felt that no recordkeeping requirements whatsoever should be imposed on 100-1000 kg/mo generators. However, many of these same commenters, when discussing the proposed single copy manifest, pointed out that most generators would opt to retain a copy of the manifest for their own records, in order to have a record of their waste management shipments, regardless of whether it was required by EPA. While some of these commenters did not want the retention of manifest copies to be required, they nevertheless felt such recordkeeping to be prudent. Other commenters believed that retention of manifest copies should be required, and that such a requirement does not impose an unreasonable burden since, as noted above, virtually all generators would retain a copy for their records in any case. These commenters also asserted that the existence of a copy of the manifest in the generator's records, containing the signature of the transporter and ultimately the signature of the designated facility when the manifest copy was returned, was essential.

The Agency agrees with these commenters that retention of manifest copies should be required. Existence of such records may be the only defense a

generator would have in enforcement actions or other litigation if the single manifest were to be changed by the transporter or if the waste is mismanaged. The existence of these records would allow a generator to demonstrate to enforcement personnel, should a problem in transporting or subsequent handling arise, that the generator had done his best to ensure proper management by fulfilling his generator responsibilities. While such proof would not eliminate any liabilities the firm may otherwise have under RCRA and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or "Superfund"), it could reduce the danger of the generator being considered the primary responsible party in a Superfund action. Also, as one commenter pointed out, given the large number of States, transporters and treatment, storage, and disposal facilities that would insist upon use of the full manifest system, it would not be appropriate for EPA to, in effect, encourage generators to deliver their only copy of the manifest to a transporter.

EPA agrees with those commenters that believe that retention of a copy of a manifest, signed by the designated facility and the transporter, does not pose an unreasonable burden for 100-1000 kg/mo generators, who will most likely be shipping only 2-4 shipments per year. This is particularly true in light of the generally universal agreement on the need for generators to retain a copy for their own protection. EPA also believes that retention of manifest copies provides the necessary incentive for all wastes handlers to execute their responsibilities in the manner required by state and Federal waste management requirements. Therefore, the Agency is not exempting 100-1000 kg/mo generators from the requirement to retain a copy of each manifest in their files for a period of three years from the date of shipment or until a signed copy of the manifest is returned by the designated facility and is substituted for the original manifest for a period of three years.

b. Exception Reports—§ 262.42: As discussed in the proposal, EPA proposed to exempt 100-1000 kg/mo generators from the requirement to file an exception report with EPA if the generator did not receive a signed copy of the manifest back from the designated facility within forty-five days of acceptance of the waste shipment by a hazardous waste transporter (§ 262.42). The proposed exemption from this requirement was based simply on the lack of manifest copies under the

proposed single copy manifest system. Under the proposed rule, a copy of the manifest was not required to be returned to the generator by the facility, so that there would have been no basis for a generator to make a determination as to whether or not his shipment actually arrived at the designated facility, and thus no basis for an exception report.

In deciding to return to a full manifest system for 100-1000 kg/mo generators, the Agency deemed it appropriate to evaluate whether also requiring exception reporting would impose an unnecessary administrative burden on these generators in light of the environmental benefit that would be gained. First, the Agency considered the responsibilities that would be imposed on the generators, which would include establishment of an internal tracking system, through filing or by computer, to allow the generator to determine whether a return copy of the manifest is overdue. In addition, the generator must contact the transporter and/or permitted facility to determine the status or location of the waste and manifest, and if unsuccessful, must file a report with a copy of the manifest and a cover letter describing his efforts to locate the waste and the results of his efforts. Several commenters objected to imposition of these requirements and argued that this is the very type of paperwork requirement that Congress intended EPA to scrutinize before applying to small businesses.

Second, the Agency considered the extent to which such reporting is necessary to protect health and the environment. Many commenters contended that the exception reports were essential to alert EPA and the States to lost shipments, and the Agency agrees that the exception report requirement is an important link in the full manifest scheme.⁴ However, the Agency has received very few exception reports since the requirement was adopted, leading it to believe that the tracking function of the multiple-copy manifest system is also working as a self-policing mechanism, ensuring that

⁴ One commenter cited legislative history as support for its argument that the modified exception reporting requirement of section 3001(d)(8) must be included in the regulations because Congress deemed it to be a minimum requirement. The legislative history of this provision indicates, however, that this was considered to be a minimum requirement only in the event that EPA did not promulgate final regulations by March 31, 1986, and that EPA is authorized to vary the manifesting and reporting requirements as long as the notice requirement is met. See S. Rep. No. 284, 98th Cong., 1st Sess. 11-12 (1983); H.R. Rep. No. 1133, 98th Cong., 2nd Sess. 103 (1984).

wastes reach their proper destination. In addition, the smaller relative risks associated with the smaller quantities of waste generated by 100-1000 kg/mo generators do not necessitate the same degree of double-checking needed for large quantity generator shipments.

In balancing the utility of the exception reporting requirements with the need to minimize the administrative and paperwork burden on small businesses, the Agency has concluded that its decision to require the multiple copy manifest system for 100-1000 kg/mo generators will provide sufficient assurance that waste shipments reach their proper destination, and that the incremental environmental benefits that may be gained by imposing the exception reporting requirement on these generators are outweighed by the associated administrative burdens. The capabilities of small businesses to develop and maintain internal tracking and follow-up systems are limited, and could prove to be very burdensome, especially where such follow-up reporting is seldom necessary. Consequently, while the Agency is today requiring generators of 100-1000 kg/mo to use a multi-part manifest form and requiring designated facilities to return a signed copy to the generator, the Agency has decided not to require generators of 100-1000 kg/mo to comply with the exception reporting provisions of Part 262. However, this exemption should not be construed as relieving the generators of the responsibility of assuring that their wastes are managed at Subtitle C facilities. This obligation, along with CERCLA liability should the waste ultimately be mismanaged, remains. Therefore, while EPA is today exempting generators of 100-1000 kg/mo from the requirement to file an exception report under § 262.42, it is specifically *encouraging* generators to perform the necessary follow-up to ensure that their waste shipments reach the designated facility. Should a shipment turn out to be truly lost, it will be in the generator's interest to send a copy of the manifest along with a brief explanatory note to EPA or the authorized State Agency in order to reduce the likelihood that the generator would be held solely responsible in an enforcement or Superfund action.

c. Biennial Reports—§ 262.41: Section 262.41 requires a generator who ships waste off-site to submit a biennial (*i.e.*, every other year) report to the Regional Administrator by March 1 of each even numbered year setting out the quantities of wastes generated during the previous odd numbered calendar year and the disposition of the wastes generated.

EPA proposed to exempt generators of 100-1000 kg/mo from the requirement to complete, file, and retain copies of a biennial report. The Agency's rationale for this exemption was based on four points. First, the extent of error in State summary reports used to compile nationwide waste generated by all small quantity generators. As a result, the value of the data from reports that would be filed by 100-1000 kg/mo generators would not significantly add to the value of the reports and the burden imposed would far outweigh the benefits to be gained. Second, the Agency explained that the large number of reports it would receive would far outweigh the agency's administrative ability to make use of the reports. Third, under the proposed single copy manifest system, generators would not have had the manifest copies that serve as the basis for preparation of biennial reports. Finally, the Agency explained that information on wastes generated by 100-1000 kg/mo generators would still be available from reports required to be filed by treatment, storage, and disposal facilities.

Several States submitted comments which generally favored retention of the biennial report requirement for 100-1000 kg/mo generators. Although generators would have available to them the manifest information needed to prepare biennial reports under today's final rule imposing the multiple copy manifest, the remaining reasons for proposing this exemption remain valid. In addition, EPA received extensive comment supporting the proposed exemption from biennial reporting requirements as an appropriate means of reducing administrative burden without sacrificing protection of human health and the environment. The Agency agrees that this exemption is appropriate.

One State specifically suggested that EPA require biennial reporting from all generators who generate more than 6000 kg or 12,000 kg in a calendar year and specifically requested clarification of the application of biennial report requirements to "episodic generators" (*i.e.*, generators that produce quantities of hazardous waste that place them in different generator categories from month to month). The Agency does not believe any benefit would be gained by establishing a new generator category based upon a yearly generation rate. Doing so would only add further confusion to an already complex regulatory scheme, and would be inconsistent with the month-to-month approach already established by statute and regulation. Also, episodic

generators must comply with the biennial report requirements for those months in which they are "large quantity generators"; that is, they must submit reports on their hazardous waste activities for those months in which their generator activities have changed and as long as the fully regulated waste remains on-site.

Thus, the Agency is today finalizing the proposed exemption from the biennial report requirements of § 262.41 for generators of 100-1000 kg/mo, including an exemption from the provisions of this section requiring a description of efforts taken during the reporting year to minimize waste generation.

4. On-site Accumulation—§ 262.34

As discussed in Unit I.B.I. of today's preamble, generators of 100-1000 kg/mo are no longer conditionally excluded in Section 261.5 from the bulk of the hazardous waste regulatory program. Instead, these generators, like other regulated hazardous waste generators, are subject to the requirements of Parts 262-266, 270, and 124, to the extent those requirements apply. For generators of 100-1000 kg/mo, however, these requirements have been modified in certain instances to reflect their small business nature as well as specific statutory directives.

Section 262.34 contains the requirements for generators that accumulate hazardous waste on-site. Under § 262.34(a), a generator may accumulate hazardous waste on-site in tanks or containers in any quantity for up to 90 days without the need to have interim status or obtain a storage permit under RCRA (or comply with Parts 264 or 265) provided the generator complies with the limited requirements of § 262.34. These requirements specify that: (i) the date upon which the period of accumulation begins is clearly marked on the tank or container; (ii) the tank or container is labeled with the words "Hazardous Waste"; (iii) the generator complies with Subparts C and D of 40 CFR Part 265 (Preparedness and Prevention and Contingency Plan and Emergency Procedures, respectively); and iv) the generator complies with Subpart I of 40 CFR Part 265 if the waste is placed in containers or with Subpart J of 40 CFR Part 265 if the waste is placed in tanks, and he complies with the personnel training requirements of § 265.16.

The proposed rules for generators of 100-1000 kg/mo would have added a number of modifications to the § 262.34 provisions, for 100-1000 kg/mo generators. This section of the preamble

discusses those proposed amendments and the issues raised by commenters to the proposed rules.

a. Time and Quantity Limitations: Section 3001(d)(6) directs EPA, in developing regulations for 100–1000 kg/mo generators, to allow storage of hazardous waste on-site without the need for interim status or a RCRA permit for up to 180 days. In addition, EPA is directed to allow these generators to store up to 6000 kg of hazardous waste for a period of 270 days without the need for interim status or a permit if the generator must ship or haul his waste greater than 200 miles. While no specific quantity cutoff was established for 180 day accumulation in section 3001(d) a de facto limitation of 6000 kg exists. (This is due to the fact that a 100–1000 kg/mo generator could produce no more than 6000 kg in a 180 day period without exceeding 1000 kg/mo at least once during that period, and thus become fully regulated under Part 262 instead of under the modified standards being proposed today for 100–1000 kg/mo generators.) EPA is today amending § 262.34 to allow for such on-site accumulation in tanks and containers by 100–1000 kg/mo generators for up to 180 days (or 270 days for long-distance transport) without the need to obtain interim status or a RCRA permit, in accordance with Section 3001(d)(6) of the HSWA, provided the requirements of § 262.34 are met.

A significant number of commenters suggested variations on the proposed time and quantity limitations for on-site accumulation. A number of States supported the application of the existing 90 day accumulation period to these generators in order to maintain consistency and reduce confusion. Still other commenters argued that the time limit for accumulation for 100–1000 kg/mo generators should be extended to a full year in order to allow economical shipments, provided the 6000 kg cutoff was not exceeded. Some commenters even favored unlimited accumulation time and quantity for these generators.

Because the time and quantity limitations are established in RCRA section 3001(d)(6), the Agency believes that it carries a heavy burden in varying these limitations. Except for emergency circumstances, as discussed below, the Agency does not believe that this burden has been met.

While the 6000 kg cap arguably applies only to the 270-day storage period, the Agency believes that the better interpretation is that the 6000 kg cap applies to both storage periods. As noted above, a maximum of 6000 kg of hazardous waste could be accumulated

during a 180-day period if the generator never generated more than 1000 kg in any given calendar month.

Consequently, any quantity in excess of 6000 kg would mean that the generator was subject to full regulation at least one month during the 6-month period. Therefore, it is logical to apply the accumulation "cap" of 6000 kg to both storage for 180 as well as 270 days. In addition, as explained in the August 1 proposal, the total quantity of 6000 kg remains the same whether or not the waste is accumulated on-site for 180 or 270 days and the Agency could see no substantive difference in potential risk. Finally, EPA believed that the high cost of transportation would dictate that the waste be managed at the closest facility, regardless of the presence or absence of regulatory criteria.

One State commenter felt that the lack of specific criteria for allowing 270-day accumulation could have the effect of encouraging continued reliance on land disposal as there will be decreasing numbers of viable land disposal facilities in the future, and the remaining facilities will increasingly be located more than 200 miles away from the generator. This commenter suggested that EPA allow accumulation for only 180 days for wastes that are destined for disposal but allow accumulation for 270 days for wastes which will be treated or recycled. EPA does not believe that it has authority to make such a distinction since Congress has already established the condition that must be met for accumulation for 270 days: where the waste must be shipped over 200 miles. If the closest facility is a disposal facility located greater than 200 miles from the generator, to allow this generator only 180 days would directly conflict with the plain language of the statute.

Another commenter expressed concern over the enforcement of 180- or 270-day accumulation periods in the absence of any specific criteria. This commenter felt that an inspector would have no way of ascertaining whether wastes which have been stored longer than 180 days but less than 270 days are destined for management at a disposal facility or a treatment or recycling facility that is located further than 200 miles away. This commenter was particularly concerned that the lack of multiple copies of the manifest would eliminate the ability of the inspector to at least make a judgment based on the generator's previous waste shipments.

The Agency has decided not to establish specific criteria for determining if a generator may accumulate hazardous wastes on-site for 180 or 270 days. EPA believes that such criteria would not serve any useful

purpose. Under today's final rule, however, generators would retain copies of manifests which could be used to ascertain the location of the facility which the generator has utilized for previous shipments. Therefore, manifest copies (or reclamation agreements) will be available as a means to check the actual location of the destination facility. In addition, the Agency was concerned that establishing criteria for demonstrating that the closest facility was greater than 200 miles from the generation site would be unnecessarily confusing and could have the perverse effect of causing waste to go to less desirable management practices (e.g., where a disposal facility is located within 200 miles while a recycling facility is located over 200 miles from the generator, the generator could be forced to utilize the less desirable disposal facility). The absence of specific criteria will not pose an unreasonable obstacle to enforcement of the accumulation provisions. Thus, EPA is finalizing § 262.34(e) as proposed.

It should be noted that generators that have multiple waste streams which are managed at different facilities may actually be subject to different accumulation time limitations for the different waste streams. A generator may accumulate some wastes for 180 days if they will be managed at a facility under 200 miles away and other wastes for 270 days provided the generator never accumulates a total quantity of hazardous waste on site that exceeds 6000 kg and provided the generator complies with all applicable accumulation provisions.

Today's rules also apply the existing provisions of § 262.34(b) requiring compliance with Parts 264, 265, and 270 to 100–1000 kg/mo generators that exceed the time limitations in proposed § 262.34(d) and (e). Under the existing rules, and under the rules promulgated today, generators that exceed a time or quantity limitation must comply with the interim status requirements and obtain a storage permit. These requirements, as they would apply to 100–1000 kg/mo generators, are contained in new § 262.34(f).

An additional component of the proposed § 262.34(f) amendments would have allowed an additional 30-day accumulation period for generators of 100–1000 kg/mo at the discretion of the Regional Administrator where he determines that such an extension is warranted due to temporary, unforeseen, and uncontrollable circumstances. This amendment was based on an identical provision currently applicable to large quantity

generators. While most commenters on this amendment were supportive of the emergency extension provision, one commenter argued that the storage periods specified in the statute were clearly the maximum periods allowed. The Agency believes that Congress never intended for the Agency to promulgate rules so inflexible that they could not take into account, and accommodate, *legitimate* emergency circumstances. In addition, the Agency assumes that the emergency extension provision is consistent with Congressional intent since it did not explicitly preclude such an extension when it adopted section 3001(d)(6). Therefore, the Agency is promulgating this provision as proposed.

Several commenters requested the Agency to clarify the applicability of the "satellite provision" of 40 CFR 262.34. This provision allows generators to accumulate up to 55 gallons of non-acutely hazardous waste in "satellite" areas where the waste is generated in industrial processes without complying with the 90-day accumulation standards. See 49 FR 49568 (Dec. 20, 1984). Satellite areas are those places (under the control of the operator of the process generating the waste) where wastes are generated in the industrial process and must initially accumulate prior to removal to a central area. Within three days of accumulating over 55 gallons, the generator is required to comply with all applicable RCRA requirements for further management of any waste in excess of 55 gallons. When the satellite rule was promulgated, generators of less than 1000 kg/mo of non-acutely hazardous waste (or less than 1 kg/mo of acutely hazardous waste) were not subject to any of the requirements of the satellite accumulation rule. See 49 FR 49568-49570. This is because these generators were exempt from most of the hazardous waste management regulations, including Part 262. However, under today's rule, only generators of less than 100 kg/mo will remain exempt from the regulations. Therefore, 100-1000 kg/mo generators may accumulate up to 55 gallons of non-acutely hazardous waste in satellite areas without meeting the storage requirements being promulgated today, so long as the requirements of § 262.34(c) are met. Of course, as soon as the 55 gallon limit has been exceeded in any satellite area, any excess waste is subject to all applicable RCRA requirements within 3 days. This means that the 180/270 day on-site accumulation provision for 100-1000 kg/mo generators applies to any excess

waste three days after the 55 gallon limit has been exceeded.

Two commenters who operate off-shore drilling facilities requested clarification on the applicability of this provision to off-shore facilities and central collection points located on-shore. These commenters cited their desire to avoid manifesting or using transporters with EPA Identification numbers in shipping wastes from off-shore facilities to on-shore collection areas.

The satellite provision was intended to provide for extended accumulation of waste in specific areas of generation to allow for more economical transporting of waste within one site. The applicability of this provision does not address the extent to which a generator must comply with Parts 262 and 263 when it is shipping wastes off-site. EPA does not deem off-shore facilities and on-shore collection facilities to be "on-site", or the same site, as defined by 40 CFR 260.10. To the extent that each facility has various points of waste generation, the satellite provision would apply; however, as in any off-site hazardous waste shipment, the requirements of Parts 262 and 263 must be met when wastes generated at each off-shore facility are transported to an on-shore collection or storage facility.

b. Standards Applicable to On-site Accumulation: EPA proposed to modify certain of the requirements for on-site accumulation by 100-1000 kg/mo generators in order to simplify the requirements for contingency plans and emergency procedures, and personnel training (contained in Part 265, Subpart D, and § 265.16). The specific amendments to § 262.34 would be contained in new paragraphs (d), (e), and (f), specifying the particular requirements applicable to on-site accumulation by generators of 100-1000 kg/mo. No modifications were proposed to the standards for storage in containers and tanks (Part 265, Subparts I and J) or to the requirements for preparedness and prevention contained in Subpart C of Part 265. EPA indicated that it believed these standards were appropriate and necessary and not unduly burdensome. Several commenters have objected to the apparent inconsistency between application of the existing accumulation provisions of § 261.5 and § 262.34 and the proposed standards under Section 3001(d) of the HSWA. Under the existing rules for conditionally exempt small quantity generators under § 261.5 and the accumulation provisions of § 262.34, generators who either generate quantities above specific cutoffs *or who*

accumulate quantities above those cutoffs over any period of time become subject to additional requirements. Thus, if the proposed rules were to be finalized, generators of less than 100 kg/mo who accumulated over 1000 kg/mo would be subject to full regulation under Part 262, including a 90 day accumulation time limit followed by permitting requirements for longer on-site storage. Also, if more than 1 kg of acutely hazardous waste were accumulated, full Part 262 standards would apply, including a 90 day accumulation time limit followed by permitting requirements for longer on-site storage. Conversely, generators of 100-1000 kg/mo would be allowed to accumulate up to 6000 kg for up to 180 or 270 days and be subject to the specially reduced standards being promulgated today rather than full Part 262 regulation.

A number of commenters pointed out that generators who fall into different generator categories could be subject to different standards for essentially the same quantities of the same wastes. For example, a generator of just over 1000 kg/mo would be subject to full regulation as would a generator of just under 1000 kg/mo who happens to accumulate above 1000 kg. These regulations include full contingency planning and personnel training (as well as exception and biennial reporting). At the same time, a generator of between 100 and 100 kg per month may accumulate up to 6000 kg and be subject to the special standards being promulgated today, including reduced contingency planning and personnel training requirements and exemptions from exception and biennial reporting. Thus, 6000 kg of hazardous waste could be subject to lesser standards than quantities closer to 1000 kg/mo. Substantial confusion may also result in determining which storage standards apply, when, and for how long. The confusion is particularly troubling for so called "episodic generators" that may move from one generator category to another from month to month. (See Unit III.B.2.e.)

A number of commenters suggested a variety of alternatives schemes for eliminating the inequity and the confusion, including applying the reduced storage standards proposed for 100-1000 kg/mo generators to all quantities of waste accumulated up to 6000 kg., regardless of the source of the waste. These commenters believed that such a scheme would greatly simplify compliance and enforcement since quantity of waste would be the only

criteria needed in determining what storage standards should apply.

The Agency agrees that, in theory, an approach that uniformly applies the same requirements to the same quantities of waste has some merit. However, as discussed above, Congress has directed EPA to consider varying the standards for 100-1000 kg/mo generators only, and to consider their small business nature in determining which standards are appropriate for on-site accumulation. EPA is directed to relieve these generators of unnecessary burden, to the extent feasible, and consistent with protection of human health and the environment. Given that Congress has not extended such economic considerations to large generators, EPA is not authorized to vary applicable storage standards, if they are necessary to protect human health and the environment. EPA has already determined that the existing storage standards applicable to generators of more than 1000 kg/mo are necessary to reduce risks sufficiently. Therefore, EPA is retaining the existing standards for these generators.

With regard to generators of less than 100 kg/mo, EPA has more flexibility because they fall within the "small business" category that Congress was concerned about. The Agency decided in the proposed rules not to modify the accumulation provision for generators of less than 100 kg/mo because such a generator would need to accumulate waste for at least 10 months before exceeding 1000 kg. However, it appears to be inconsistent with Congressional intent that small businesses producing less than 100 kg/mo should be subject to more stringent accumulation standards than 100-1000 kg/mo generators for quantities between 1000 kg and 6000 kg. Therefore, EPA is today finalizing an amendment to § 261.5 that will subject generators of less than 100 kg/mo to the same provisions of § 262.34(d) as are applicable to generators of 100-1000 kg/mo, when they accumulate waste in quantities greater than 1000 kg but less than 6000 kg.

i. Standards for Preparedness and Prevention—Part 265, Subpart C: Under § 262.34(a), generators who accumulate hazardous waste on-site must comply with the requirements of Subpart C of Part 265 which contains requirements for facility preparedness and prevention. In the Proposal, EPA indicated its intention to apply all of the existing provisions of this Subpart, without modification.

The requirements for preparedness and prevention are as follows:

- Section 265.31 requires that facilities be maintained and operated to

minimize the possibility of fire, explosion, or any unplanned release of hazardous waste or hazardous waste constituents to the environment;

- Section 265.32 specifies that facilities must be equipped with certain kinds of equipment (*i.e.*, an internal communications or alarm system, a telephone or other device capable of summoning emergency assistance, and appropriate fire control equipment including fire extinguishers and water at adequate volume and pressure to supply fire control system) *unless* none of the wastes handled at the facility require a particular kind of equipment;

- Section 265.33 requires that this equipment be tested and maintained, as necessary, to assure its proper functioning;

- Section 265.34 requires that all persons involved in hazardous waste handling operations have immediate access to either internal or external alarm or communications equipment, unless such a device is not required under § 265.32;

- Section 265.35 requires the owner or operator of the facility to maintain sufficient aisle space to allow the unobstructed movement of personnel and equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes; and

- Section 265.37 requires the owner or operator to attempt to make certain arrangements with police, fire departments, State emergency response teams, and hospitals, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations. Further, if State or local authorities decline to enter into such arrangements, the owner or operator must document the refusal.

The Agency did not propose any amendments to Subpart C because they are appropriate and necessary and not unduly burdensome. The requirements all involve common sense principles for preparedness and prevention which hazardous waste handlers can and should address in order to ensure safe handling of hazardous wastes. Also, since the requirements are structured such that specific equipment and procedures are required only on an "as needed" basis, the existing regulation provides complete flexibility for hazardous waste generators to tailor their preparedness and prevention activities to the specific kinds of wastes handled at the facility.

Most commenters believed that these requirements provided sufficient flexibility for 100-1000 kg/mo generators to tailor their preparedness activities to their specific waste management

activities and needs. While EPA requested comment on the possibility of imposing more specific but less numerous requirements in order to alleviate potential uncertainty over which procedures are appropriate for particular types of wastes, the Agency has decided that the broad principles embodied in Subpart C are preferable to the specific suggestions made by commenters. For example, one commenter felt that the requirement to make arrangements with state and local authorities, as needed, would confuse many generators and suggested that EPA substitute a simpler requirement that a generator simply request a visit from the fire department. EPA believes, however, that such a specific requirement would not provide sufficient preparedness in some cases, while in others it may be overly burdensome, as where no ignitable or flammable wastes are managed at that site.

A number of commenters were concerned that the requirement to document refusals to make appropriate arrangements by state and local authorities and health care facilities would prove to be extremely burdensome to small businesses, particularly since refusals are seldom likely to be made in writing. EPA did not intend to convey a need for generators to obtain written refusals from every entity that declined to visit the facility. For purposes of this requirement, EPA will consider a signed and dated letter from the generator to the state or local entity which attempts to make such arrangements to be sufficient documentation of an attempt to make the appropriate arrangements.

One commenter believed that the requirement to make arrangements with appropriate state and local emergency service facilities was unnecessary where generators maintain their own fire, security, and emergency health care personnel at some of their larger facilities and that such facilities should be allowed to fulfill this requirement without making outside arrangements. While the Agency did not intend to preclude the use of on-site emergency personnel to provide preparedness in the case of emergencies, EPA does not agree that such arrangements alone will always be sufficient to comply with the requirements of Subpart C where the nature of the waste management operations at that facility could result in emergencies also requiring the involvement of State and local emergency services.

This commenter was also concerned that EPA's broad definition of "facility"

could require that preparedness and prevention measures be maintained throughout every portion of the generator's property instead of just those areas where waste is accumulated. EPA has never intended its broad definition of "facility" (see 50 FR 28712) to be used in application of the preparedness and prevention regulations; rather, the definition of "facility" in § 260.10 is used. Applying this narrower definition makes clear that the preparedness and prevention regulations only require the generator to take those precautions and maintain that equipment necessary to ensure that they are adequately prepared to respond to emergencies relating to the hazardous waste operations of the facility. If special equipment or precautions are not needed for this purpose in areas of a facility where hazardous wastes are not managed, then a generator is not expected to maintain them in those areas. At the same time, however, other precautions, such as adequate aisle space, may be needed in areas outside of the immediate waste accumulation area in order to ensure adequate access to emergency equipment in the event of a fire, explosion, or release of hazardous waste or hazardous waste constituents.

For the reasons discussed above, the Agency does not believe that modifications to Subpart C of Part 265 are appropriate for generators of 100-1000 kg/mo and is, therefore, applying the existing Subpart C requirements to these generators.

ii. Standards for Contingency Plans and Emergency Procedures—Part 265, Subpart D, and Personnel Training Requirements: Under § 262.34(a), generators who accumulate waste on-site must comply with certain requirements in Part 265, Subpart D, pertaining to contingency plans and emergency procedures and personnel training requirements. These requirements are contained in § 265.16. The § 265.16 requirements are intended to ensure that personnel are adequately prepared to manage hazardous waste and to respond to any emergencies that are likely to arise. EPA considered applying these same requirements to 100-1000 kg/mo generators since, for the most part, the requirements embody common sense principles that are necessary and appropriate for facilities managing hazardous waste. However, these requirements appeared to be unnecessarily burdensome in some cases (e.g. requiring formal classroom training and written, detailed contingency plans) and costly and could have unnecessarily severe impacts on many small businesses. The Agency

therefore proposed a simpler set of requirements for generators of 100-1000 kg/mo to reduce the administrative burden on small businesses while still protecting human health and the environment.

EPA proposed and requested public comment on the following requirements for 100-1000 kg/mo generators that would be contained in a new § 262.34(d):

- At all times, an "emergency coordinator" (E.C.); (i.e., someone familiar with these requirements), must be on-site (or on call). The coordinator may also designate someone to act in his place.
- The generator must post certain information next to the telephone, including: the name and telephone number of the E.C.; location of fire extinguishers and spill control material; and the phone number of the fire department;
- The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures;
- The generator (or the E.C.) would have to respond to any emergencies that arise. In the case where an emergency was serious enough to warrant a visit by the fire department or when the generator (or E.C.) has knowledge of a spill of hazardous waste that could reach surface water or otherwise threaten human health or the environment, the generator would have to notify the National Response Center and file a report with the EPA Regional Administrator as provided by proposed § 262.34(c)(3)(E).

EPA believed these requirements to be adequate to protect public health and the environment from fires, leaks, spills, or other releases from generators of 100-1000 kg/mo who are accumulating waste on-site prior to shipment off-site.

While many commenters supported the reduced contingency plan, emergency procedures, and personnel training requirements as proposed, a number of commenters did not agree with the proposed modifications. Several commenters believed that relaxing the standards for on-site accumulation for 100-1000 kg/mo generators would not be appropriate given the increased quantities of waste which can be accumulated (i.e., 6000 kg) and the generally less sophisticated waste management expertise of smaller firms. Some commenters suggested various approaches including requiring full Subpart D compliance for all quantities accumulated above specific limits, such as 1000 kg or 3000 kg. Other commenters argued that the reduced standards were appropriate not only for

generators of 100-1000 kg/mo, but also to larger generators and suggested that the reduced standards apply to all accumulated quantities between 1000 kg and 6000 kg.

Since the Agency recognized in the proposed rules that applying standards to 100-1000 kg/mo generators accumulating waste on-site in quantities up to 6000 kg was of some concern, it was careful to modify the standards only where administrative requirements not essential to the substantive functioning of the standards were involved. Thus, the standards, as modified, are sufficient to protect human health and the environment from release of wastes accumulated by 100-1000 kg/mo generators.

EPA does not believe it is appropriate to apply the reduced standards to wastes accumulated by generators of more than 1000 kg/mo. As previously discussed, EPA's authority to consider areas in which to reduce burdens extends to small quantity generators. Also, as discussed in Unit III.A. above, the relative risks posed by wastes accumulated by large quantity generators are greater. Thus, generators of greater than 1000 kg/mo must comply with the requirements of Subpart D of Part 265 if wastes are accumulated on-site prior to shipment off-site.

A number of commenters also suggested several modifications to the proposed standards. Some commenters were concerned that the requirement that each business designate an emergency coordinator to be on call at all times would impose an undue burden because this would require that the emergency coordinator be trained in emergency response procedures. One commenter believed that the term "emergency coordinator" would be confusing since it implies that the individual must have a high degree of training in risk assessment and abatement.

The intent of this requirement was simply to ensure that each generation facility had at least one person available at all times who could be contacted and would know what steps to take in the event that an emergency should arise. EPA envisioned that for most small businesses, the owner or manager already fulfills this requirement by being available 24 hours a day in case an emergency, such as a fire or burglary, occurs at that facility. EPA does not intend that generators must hire and train a new employee for this task. Viewed in this light, this requirement is reasonable and not unduly burdensome. In addition, there is no reason why small businesses would confuse the

term "emergency coordinator" with the more formal On-Scene Coordinators at Superfund clean-up sites.

With regard to the proposed personnel training requirement that a generator ensure that all employees be made thoroughly familiar with waste handling and emergency procedures, several commenters were in favor of more stringent personnel training requirements. One commenter noted that personnel training is necessary to manage tanks properly and to prevent tank contamination and recommended that the Agency adopt more stringent personnel training requirements if more than 15 drums or 7,500 pounds (approximately 3400 kg) are accumulated on-site. Another commenter objected to allowing 100-1000 kg/mo generators, who typically have fewer resources and less expertise than large quantity generators, to accumulate 6000 kg on-site with reduced personnel training standards, and suggested that personnel training plans be required whenever more than 3000 kg are accumulated on-site. This commenter suggested that criteria such as the nature of the waste and the history of spills and releases from the generator be established to allow EPA or State agencies to require a generator of 100-1000 kg/mo to establish and implement a personnel training plan.

In the absence of any justification provided by commenters, the Agency does not believe that establishing an intermediate limit on accumulation, after which more formal personnel training requirements apply, would result in any significant increase in protection to human health and the environment. While EPA agrees that risks involved increase as waste is accumulated, it believes that the requirements adopted are adequate to protect against the risks from fires, leaks, spills, or other releases. The proposed requirements embody the same principles contained in the existing personnel training requirements, but rely less on the preparation of written plans in order to reduce the burdens on 100-1000 kg/mo generators.

One commenter suggested that if a 100-1000 kg/mo generator at any time is required to prepare a personnel training plan because he generated more than 1000 kg in any one month, he should be required to maintain the personnel training plan for at least the following six months even though he produces no more than 1000 kg/mo during that period. The commenter suggested that this requirement would impose little burden because the plan would already

be in existence and would only need to be implemented. The Agency is not adopting this suggestion. No rationale was offered by this or other commenters regarding any additional protection that this approach would provide. In addition, the Agency disagrees with the conclusion that little burden would be imposed in maintaining a plan. For example, the generator would be required to update job titles, job descriptions, job qualifications, names of employees in each position, and standards for the introductory and continuing training needed for persons in each position. Furthermore, even if not required by regulations to maintain and follow their plans, many of the generators of 100-1000 kg/mo who were previously generators of more than 1000 kg/mo will nevertheless continue to use their plans as the basis for their personnel training program.

Another commenter in favor of more stringent personnel training requirements argued that the approach proposed by EPA is too broad and unenforceable, and that the Agency should require employees to sign a document stating the "what, when, and where" of employee training." The Agency believes that such an approach would add considerable burden to the generator without providing any substantial additional degree of protection, particularly since the "what, when, and where" are not explicitly prescribed under either the current rules or today's amendments.

Two commenters argued that 100-1000 kg/mo generators should be exempt from all personnel training requirements on the basis that personnel training would be too costly and burdensome for most small businesses and because less than 1000 kg/mo would be "too small to endanger the environment or public health". The Agency does not agree that 100-1000 kg/mo generators should be exempt from all personnel training requirements. While the Agency agrees that the risk to human health and the environment posed by 100-1000 kg/mo generators is less than the risk posed by large quantity generators, some risk is still present. The Agency has, therefore, proposed less stringent rules for 100-1000 kg/mo generators, which will mitigate this risk while minimizing the regulatory burden upon these generators.

A number of commenters suggested that the Agency limit the scope of the training requirement since it is inappropriate to require that all employees of a generator receive personnel training, regardless of their job responsibilities. According to these

commenters, some firms, particularly large companies, may have clerical and office staff as well as some part-time and temporary personnel "who will never be involved or even remotely associated with the firm's handling of hazardous waste", and requiring these employees to be thoroughly familiar with hazardous waste management techniques would be a poor use of the firm's resources. One commenter suggested that this requirement be applied only to those employees who handle hazardous waste as part of their job.

The Agency agrees that it would not make sense to require training in topics not germane to an employee's areas of responsibility since this would add considerable burden to some firms without corresponding environmental or health benefits. Thus, the Agency has amended the regulations to clarify this issue. The rule promulgated today states that generators "must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures relevant to their job responsibilities during normal facility operations and emergencies," just as for large quantity generators subject to § 265.16, implicit in the regulations is the requirement that the type and amount of training necessary for each employee stems from his specific responsibilities. Employees who handle hazardous wastes as part of their normal job responsibilities or are likely to handle wastes in an emergency situation must be thoroughly familiar with proper waste handling and emergency procedures. Employees who work in or adjacent to areas where hazardous wastes are generated, handled, or stored but do not handle hazardous wastes, must still be trained to be thoroughly familiar with basic emergency procedures. Part-time or temporary employees must also receive appropriate training.

iii. Standards for Accumulation in Containers—Part 265, Subpart I: Section 262.34 requires that in order to accumulate hazardous waste on-site without a permit, the generator must meet certain requirements. If the waste is stored in containers, the generator must comply with Subpart I of Part 265 (§§ 265.170 thru 265.177) which contains the following general requirements applicable to the management of hazardous waste storage containers:

- They must be kept in good condition and any leaking containers replaced (§ 265.171);
- The containers must be compatible with the hazardous waste stored in them (§ 265.172);

- Containers holding hazardous waste must always be closed during storage (except when necessary to add or remove wastes) and must not be handled in a way that would cause them to rupture or leak (§ 265.173);

- Containers must be inspected at least weekly to check for leaks and any signs of corrosion (§ 265.174);

- Containers holding ignitable or reactive wastes must be placed at least 50 feet from the facility's property line (§ 265.176); and

- Incompatible wastes must not be placed in the same container so as to cause fires, leaks, or other discharge of hazardous waste or hazardous waste constituents (§§ 265.177 and 265.17(b)).

In addition, § 262.34(a)(2) requires that the date upon which each period of storage begins is clearly marked on each container and § 262.34(a)(3) requires that each container be marked with the words "Hazardous Waste".

Since these requirements embody common sense "good housekeeping" requirements necessary to avoid releases into the environment, EPA proposed no modifications to these standards for 100-1000 kg/mo generators. Comments received generally indicate that these requirements were not unduly burdensome and would be appropriate for 100-1000 kg/mo generators. The one major concern raised by a number of commenters, however, is the requirement that a buffer zone of at least 50' from the property boundary be maintained for reactive or ignitable wastes. Since many smaller generators are located in urban areas, it is not uncommon for these generators to be located on lots that would not permit the maintenance of a 50-foot buffer zone.

EPA agrees with commenters that this requirement would put many small businesses in a situation in which it would be impossible to comply. Since the Agency has already proposed to modify the buffer zone requirement to increase flexibility in such situations (49 FR 43290, June 5, 1984), it would make sense for the Agency to exempt 100-1000 kg/mo generators from the 50-foot buffer zone requirement until the Agency promulgates final storage standards. Whether the Agency ultimately decides to apply the proposed standards to these generators or to propose a more tailored set of standards, it would be inconsistent with the directives contained in HSWA Section 3001(d) to consider impacts on small business to include, in the interim, the existing buffer zone requirement. Therefore, as an interim measure, the Agency is exempting 100-1000 kg/mo generators from the § 265.176 requirement that

containers holding ignitable or reactive wastes must be placed at least 50 feet from the property boundary. Of course, 100-1000 kg/mo generators should endeavor to store ignitable or reactive wastes as far from the property boundary as is practicable.

With the exception of the modified buffer zone requirement, EPA is incorporating by reference the requirements of Subpart I of Part 265 into § 262.34(d).

iv. Standards for On-site Accumulation in Tanks—Part 265, Subpart J: As in Subpart I, Subpart J contains general standards that must be followed by generators storing hazardous waste in tanks under § 262.34:

- Wastes must not be placed in tanks if they could cause ruptures, leaks, corrosion, or otherwise cause the tank to fail (§ 265.192(b));

- Uncovered tanks must be operated with at least 60 centimeters (2 feet) of freeboard or a secondary containment dike or trench to prevent overflowing spillage (§ 265.192(c));

- Where waste is continuously fed into a tank, the tank must be equipped with a waste feed cutoff or bypass system to stop the inflow to the tank (§ 265.192(d));

- At least once each operating day, a generator must inspect, where present, discharge control equipment (e.g., waste feed cut-off systems and drainage systems), data gathered from monitoring equipment (e.g., pressure and temperature gauges), and the level of waste in the tank to assure compliance with the above freeboard requirements (§ 265.194 (a)(1), (a)(2), and (a)(3));

- At least weekly, a generator must further inspect the construction materials of the tank and the area immediately surrounding the tank to detect corrosion or obvious signs of leakage (§ 265.194 (a)(4) and (a)(5));

- Special requirements apply to ignitable or reactive waste, and incompatible waste that are more or less analogous to those in Subpart I. The major difference is in the requirements for ignitable or reactive waste which, when stored in a covered tank, must be in compliance with buffer zone requirements contained in Tables 2-1 through 2-6 of the National Fire Protection Association's (NFPA) "Flammable and Combustible Liquids Code." These requirements are based on the hazardous characteristics of all combustible and flammable liquids and, as such, are applicable to any type and size of tank. While the Agency is modifying the buffer zone requirements for containers, as discussed in the previous section, the Agency did not receive any comments indicating that

compliance with the NFPA code with respect to tanks would be impossible for small quantity generators. Therefore, the existing buffer zone requirements for tanks will apply to generators of 100-1000 kg/mo.

The requirements of Subpart J are meant not only to protect human health and the environment, but are in the generator's best interest by reducing the likelihood of damages or injuries caused by leaks and spills. The Agency did not propose to modify these standards for 100-1000 kg/mo generators, and no commenters raised any objections to application of the existing Subpart J requirements to 100-1000 kg/mo generators. Thus, the Agency has no reason to believe that the existing tank requirements present a problem for these generators, and is including them in this rule.

As discussed in detail in the Proposal, the Agency is developing new management standards for tank storage that may require secondary containment for accumulation tanks. These proposed amendments to Subpart J (50 FR 26444, June 26, 1985) could impose additional costs if applied to generators of 100-1000 kg/mo who accumulate hazardous waste in tanks. In the Proposal, the Agency requested and received public comment on a variety of options related to the proposed tank amendments. However, the Agency has not yet completed its evaluation of this issue and has not issued any final amendments to Subpart J. Accordingly, the Agency is today applying to generators of 100-1000 kg/mo only those Subpart J requirements currently required under § 262.34. Application of any modified tank standards to generators of 100-1000 kg/mo will be evaluated in the final tank rule after consideration of all comments received on both the August 1 Proposal and the tank proposal of June 26, 1985.

The requirements of existing Subpart J of Part 265 are, therefore, incorporated by reference in § 262.34(d), and are applicable to generators of 100-1000 kg/mo.

5. International Shipments

On March 13, 1986, EPA proposed regulations under § 3017 of HSWA regarding exports of hazardous waste (See 51 FR 8744). The proposed regulations would prohibit export of hazardous waste unless certain requirements are met. These requirements include advance written notification to EPA of any plans to export hazardous waste, prior written consent to such plan by the receiving country, attachment of a copy of the consent to the manifest accompanying

each waste shipment, and conformance of the shipment to such consent. EPA also proposed a manifest pursuant to 40 CFR Part 262, Subpart B, or equivalent State provision, which specifies a treatment, storage or disposal facility in a foreign country as the facility to which the waste will be sent. Under 40 CFR 261.5 and today's final rule all generators, including those generating less than 100 kg/mo, would qualify as exporters under the export proposal. Although the Agency is not aware of any exports by generators of less than 1000 kg/mo, and hence, did not propose to change the applicability of the export requirements to these generators, the Agency has requested comment from generators of less than 1000 kg/mo on whether the Agency should partially or totally exempt them from the proposed export requirements. Thus, generators affected by today's final rule should be aware that they may be subject to additional regulatory requirements in exporting hazardous waste, and that they have the opportunity to submit comments regarding the applicability of those requirements to the public docket established for the export proposal.

D. Transportation Issues

The existing standards for transporters of hazardous waste are contained in 40 CFR Part 263, and are applicable to any form of hazardous waste transportation that requires the use of a hazardous waste manifest (§ 263.10(a)). These standards pertain to compliance with the manifest system, recordkeeping, and actions to be taken in response to spills or discharges of hazardous waste. Taken in conjunction with U.S. Department of Transportation (DOT) requirements under the Hazardous Materials Transportation Act (HMTA) regarding labeling, marking, packaging and placarding (incorporated in 40 CFR Part 262, Subpart C), such standards are deemed by the Agency to be those necessary to protect human health and the environment during the transportation of hazardous waste.

In directing EPA to develop standards for generators of 100-1000 kg/mo, Section 3001(d)(7) of RCRA, as amended, specifically states that "nothing in this subsection shall be construed to affect or impair the validity of regulations pursuant to the Hazardous Materials Transportation Act." Consequently, EPA did not propose any substantive amendments to applicable DOT requirements or to Part 263. However, several minor amendments are necessary to bring the transporter standards into conformance

with today's final standards for 100-1000 kg/mo generators.

In addition, commenters on the proposed rules raised a number of transportation-related issues. The Agency is finalizing proposed § 263.20(h) to specify certain recordkeeping requirements for transporters (who are also reclaimers) accepting unmanifested hazardous waste from generators utilizing the § 262.20(e) exemption for wastes reclaimed under contractual agreements. While one commenter argued that these recordkeeping requirements were too burdensome, the Agency does not agree. The manifest exemption is an entirely voluntary arrangement that substantially reduces the paperwork for both generators and transporters. The transporter need not maintain the prescribed records if he chooses instead to comply with the manifest system. A number of commenters were concerned about the lack of established transportation networks for the collection and transportation of less than full truckloads of hazardous waste. Three commenters stated that EPA should take steps to encourage such networks, and suggested various alternatives. Two commenters suggested that EPA encourage the establishment of collection centers for waste from 100-1000 kg/mo generators by extending the current 10-day period for transportation to 21 days and accelerating the issuance of storage permits for facilities which serve as collection and transfer stations for small quantity generator waste. One of these commenters specifically suggested that development of a class permit concept for these facilities might be a viable solution.

EPA agrees that the development of networks and centralized collection centers will help to increase compliance with these regulations. However, commenters have not adequately demonstrated a need for longer transportation time than the 10 days currently provided. Nor does EPA believe that the establishment of an expedited permit process for these facilities is feasible. Both of these issues are discussed in greater detail in the following section on facility standards. It should be noted here, however, that such networks can be established at any time within the confines of the applicable regulations.

Some commenters expressed concern about EPA's discussion in the proposed rules of self-transportation of hazardous wastes, stating that all of the standards for hazardous waste transportation should be imposed on such generators. In the proposal, EPA explained that self-

transportation of hazardous waste by generators was not precluded by the regulations, provided the generator obtained a U.S. EPA ID number and complied with the provisions of Part 263 and the applicable portions of Department of Transportation regulations. EPA did not intend to create the impression that self-transportation could be conducted without compliance with the full Part 263 standards for hazardous waste transportation.

Other commenters supported the concept of licensing transporters to assume the responsibilities of the generator with respect to manifesting. As EPA explained in the Proposal, transporters may currently assume most of the generators' manifesting responsibilities except for signing the certification statement. One commenter believed that the transporter of a hazardous waste shipment should assume liability for the waste if that transporter completed the manifest and removed the waste from the generator's establishment. EPA may not alter the liabilities established by statutes such as CERCLA, which applies the concept of joint and several liability to all handlers of a hazardous substance. In addition, EPA believes that removing RCRA liability from generators would remove an important incentive for them to ensure that their wastes are properly transported and managed. EPA, therefore, is taking no action that would alter a generator's liability under current regulations and statutes.

Two States requested an amendment to § 262.20(e) to allow generators of 100-1000 kg/mo to transport waste to a temporary collection site of a hazardous waste clean-up program or Amnesty Day without the need to complete a manifest. They stated that the requirement to complete a manifest may discourage some establishments from participating. Under most "Amnesty Day" programs of which the Agency is aware, homeowners are encouraged to bring their unwanted household hazardous wastes to a central collection point where they are sorted, packaged, and subsequently transported to an approved hazardous waste management facility. In some cases, small quantity generators have been allowed to discard their wastes through similar programs.

Section 261.4(b)(1) exempts household waste from all of the hazardous waste requirements of RCRA. Thus, no manifesting is required for transport of wastes that are exempt from regulation under § 261.5. However, because quantities of hazardous wastes from generators of 100-1000 kg/mo could pose a substantial risk if improperly

managed, the Agency has decided to impose manifest requirements on these generators, except in the case of certain reclamation agreements. The existence of a State-approved collection center does not, on its own, provide assurance that the waste would be transported or handled properly prior to or during transportation to such a facility, or indeed, that the shipment would ever reach such a facility. Consequently, development of some recordkeeping and transportation requirements would be needed which would offset any potential savings of such an exemption.

E. Part 264/265 Facility Standard Issues

The requirements for facilities that treat, store, or dispose of hazardous waste are contained in Parts 264 and 265 of the hazardous waste regulations. The Part 265 standards are applicable to facilities under interim status, a condition which allows a facility to continue operating until it receives a full RCRA permit. (See HSWA section 3005(e)). The Part 264 standards establish the minimum standards to be incorporated into a full RCRA permit by EPA or a State with an EPA authorized hazardous waste program.

Section 261.5(b) previously exempted generators of 100–1000 kg/mo of hazardous waste from the facility requirements of Parts 264 and 265 that cover the on-site treatment, storage, or disposal of hazardous waste, provided the facility is at least approved by a State to manage municipal or industrial (non-hazardous) solid waste and no more than 1000 kg of hazardous waste were accumulated at any time. Under the rules promulgated today, this exemption will continue to apply only to generators of less than 100 kg/mo of hazardous waste. Generators of 100–1000 kg/mo of hazardous waste will be subject to full regulation under Parts 264 and 265 if they accumulate hazardous waste on-site for greater than 180 (or 270) days, exceed the 6000 kg accumulation limit, engage in waste treatment in other than tanks, or manage their waste in surface impoundments, waste piles, landfills, or land treatment facilities. In addition, those State-approved municipal or industrial waste facilities that manage wastes only from generators of 100–1000 kg/mo will also no longer be exempted from the Part 264 and 265 permit requirements. In the proposed rule, the Agency requested comments concerning the application of the uniform Part 264 and 265 requirements to generators of 100–1000 kg/mo and to the treatment, storage, and disposal facilities that accept waste from the generators.

1. Activities Requiring Permits

Under today's final rules, 100–1000 kg/mo generators will be required to obtain a permit if they treat or dispose of hazardous waste on-site (except for treatment in tanks or containers during the 180/270 day accumulation period in conformance with Subparts J or I of Part 265, respectively) or accumulate hazardous waste on-site in tanks or containers for more than 180 (or 270) days.

A number of commenters agreed with the need to manage wastes from generators of 100–1000 kg/mo at fully permitted facilities. They argued that no special exemptions or requirements should be applied to the management of waste from these generators because the characteristics of the waste, not the source of the waste, poses the threat to human health and the environment.

Two commenters opposed the requirement for generators of 100–1000 kg/mo who accumulate waste on-site for longer than 180 (or 270) days to obtain RCRA permit, and argued that the accumulation time limit before permitting is required should be extended. One of the commenters also maintained that determining the maximum quantity of hazardous waste that may be accumulated at a non-permitted facility should be based on the degree of hazard posed by the waste and the generator's capacity to transport the waste off-site. The EPA disagrees with both of these positions. As noted in Unit III.C.4.a. of today's preamble, the HSWA of 1984 clearly limit Agency discretion in this matter. The Agency carries a heavy burden in extending the time limits established under section 3001(d)(6), and except for emergency circumstances, the Agency does not believe there to be sufficient justification for extending the limits Congress has established.

Another commenter opposed any permitting requirement due to the economic burden that would be placed on a small number of generators. While some generators of 100–1000 kg/mo may be burdened financially by the requirements promulgated today, Congress has already judged that outside of the accumulation limits allowed for in Section 3001(d)(6), disposal of wastes from these generators at permitted facilities is necessary to protect human health and the environment. In addition, since the rules allow generators to manage their hazardous wastes off-site, they are able to avoid the cost of acquiring a RCRA permit, if they so choose.

Several commenters suggested exemptions from the RCRA permitting requirements or reduced permit

requirements for on-site waste treatment. Some commenters stated that there is a need to encourage on-site treatment to reduce the amount of wastes sent off-site and that the permitting requirements may hamper the ability of generators to treat wastes at their facilities.

The Agency disagrees that on-site treatment should be encouraged by exempting those generators of 100–1000 kg/mo from the RCRA permitting requirements. To the extent that these generators are conducting the same treatment/storage or treatment/disposal as other permitted facilities, their on-site treatment activities pose a potential risk to human health and the environment. Therefore, reduced or eliminated permitting requirements would be inappropriate.

Of course, no permitting would be required if a generator chooses to treat their hazardous waste in the generator's accumulation tanks or containers in conformance with the requirements of § 262.34 and Subparts J or I of Part 265. Nothing in § 262.34 precludes a generator from treating waste when it is in an accumulation tank or container covered by that provision. Under the existing Subtitle C system, EPA has established standards for tanks and containers which apply to both the storage and treatment of hazardous waste. These requirements are designed to ensure that the integrity of the tank or container is not breached. Thus, the same standards apply to a tank or a container, regardless of whether treatment or storage is occurring. Since the same standards apply to treatment in tanks as applies to storage in tanks, and since EPA allows for limited on-site storage without the need for a permit or interim status (90 days for over 1000 kg/mo generators and 180/270 days for 100–1000 kg/mo generators), the Agency believes that treatment in accumulation tanks or containers is permissible under the existing rules, provided the tanks or containers are operated strictly in compliance with all applicable standards. Therefore, generators of 100–1000 kg/mo are not required to obtain interim status and a RCRA permit if the only on-site management which they perform is treatment in an accumulation tank or container that is exempt from permitting during periods of accumulation (180 or 270 days).

Two commenters suggested that a mechanism should be created to tailor RCRA permits to the circumstances of individual facilities. For example, one commenter specifically asked for a simplified and streamlined permit for the incineration of spent paint spray

booth filters. The Agency accepts the need to consider individual circumstances when drafting RCRA permits. However, in order to protect human health and the environment, the Agency must impose certain minimum permit requirements for each waste management facility. Additional provisions may be incorporated into a permit to account for unique circumstances at individual facilities (see § 270.32). At the present time, the Agency has decided not to take any action regarding the tailoring of regulatory requirements for permitting specific types of waste management activities for generators of 100-1000 kg/mo. At a future date, the Agency may consider altering the regulatory requirements for specific waste types or handling practices that pose a low potential for harm to human health and the environment.

Two commenters discussed the need for establishing regional collection centers for the temporary storage of wastes from generators of 100-1000 kg/mo before being sent to treatment, storage, or disposal facilities. One of these commenters suggested that the collection centers may also offer waste identification and packaging services and could be sponsored by State or local governments. Both commenters contended that regional collection centers will be needed because most waste shipments from generators of 100-1000 kg/mo will be too small to justify the expense of direct transportation to TSDFs in less than truckload quantities. The commenters further stated that these collection centers should not be required to meet the full RCRA permit requirements for storage facilities.

While the rules promulgated today may increase the cost of waste transportation services for many generators of 100-1000 kg/mo, generators of 100-1000 kg/mo are allowed to accumulate hazardous waste at their facilities for 180 (or 270) days, thereby reducing the need for frequent shipment off-site and off-site collection centers. Nevertheless, if regional collection and storage facilities are established, these centers will probably accumulate significant volumes of various types of hazardous waste. The storage of large amounts of hazardous waste, regardless of its point of origin, poses the potential for harm to human health and the environment. Therefore, the Agency believes that the requirements for storage and disposal facilities as described in Parts 264 and 265 must also apply to regional collection facilities. Furthermore, wastes shipped from a generator of more than

100 kg/mo to a collection center must be properly identified, manifested, packaged, labeled, marked, placarded, and transported in accordance with Parts 262 and 263 and applicable regulations promulgated under the Hazardous Materials Transportation Act.

One commenter proposed that generators of 100-1000 kg/mo be exempted from the full corrective action for continuing releases provisions of RCRA section 3004(u), which apply to all solid waste management units at a Subtitle C facility seeking or issued a permit. EPA disagrees with the suggestion. Section 3004(u) applies to releases to all media; however, the Agency believes that action is required only where necessary to protect human health and the environment. Section 3004(u) requires that all permits issued to Subtitle C facilities after November 1984 shall include schedules of compliance and financial assurance for completing any necessary corrective actions for releases of hazardous waste or constituents from any solid waste management unit at the facility, regardless of the time at which such waste was placed in such unit. The clear statutory directive precludes a reading of the statute that limits an owner's or operator's responsibilities to waste placed in units during his or her tenure or for releases from solid waste management units that are not "regulated units."

The corrective action requirements will apply only to the few generators of 100 to 1000 kg/mo who choose to seek permits. Thus, the potential burden of corrective action must be accepted by those who choose to manage their hazardous waste on-site. Should such a generator become subject to the corrective action provisions, the Agency is considering the advisability of taking into account the firm's ability to pay when establishing a compliance schedule and thereby reduce the burden to generators of 100-1000 kg/mo. Nonetheless, the goal of these rules is to reduce the risk to human health and the environment from uncontrolled releases of hazardous waste. The risks associated with such releases depend on the nature of each individual release, not on the quantity of hazardous waste generated by the facility. There is no rational basis for distinguishing between generators of 100 to 1000 kg/mo and larger quantity generators when determining whether a release, once it occurs, poses an imminent threat to human health and the environment and needs to be cleaned up.

2. Applicability of Permitting Requirements to Recycled Wastes

Several commenters addressed the issue of recycled wastes. One commenter stated that generators of 100-1000 kg/mo who recycle the generated products should not be required to meet full Parts 264 and 265 facility standards. The commenter argued that since recyclable wastes are frequently handled as if they were original products, they should not be subject to regulation. This approach has already been considered by the Agency and rejected (See 50 FR 614, 617 (January 4, 1985)). At the time, EPA indicated that wastes often have little independent economic value, but are recycled to avoid disposal costs. Unless the wastes are extremely valuable (as in the case of precious metal-containing wastes), there is little incentive to avoid leaks and spills. EPA sees no reason to reconsider the issue at this time.

Two other commenters sought clarification concerning whether the proposed rule requires on-site waste recycling operations to be permitted under Parts 264 and 265. While the actual recycling operation is generally not subject to permitting, the rule does, indeed, require (or will require) permitting for certain recycling activities and for storage associated with recycling activities. Generators of 100-1000 kg/mo of recyclable materials must obtain a permit or interim status if all of the following conditions are met:

(1) The material is a solid waste. Whether or not a material qualifies as a solid waste depends upon both what the material is and how it is being recycled. See §§ 261.2 and 261.4(a).

(2) The solid waste is a hazardous waste. Generally, the waste must be listed or exhibit one of four characteristics. See §§ 261.3 and 261.4(b).

(3) The hazardous waste is not exempt from regulation under § 261.6. Exempted materials include industrial ethyl alcohol that is reclaimed and scrap metal.

(4) The non-exempt hazardous waste is stored on-site for more than 180 days (or 270 days if it is to be transported at least 200 miles). See § 262.34(d).

If the solvent is stored in anticipation of reclamation for more than 180 days, however, the generator must obtain a permit or interim status. See § 262.34(f). In addition, use constituting disposal and burning for energy recovery would also be recycling activities requiring a permit.

3. Permit By Rule

Two commenters argued that generators of 100–1000 kg/mo should be allowed to obtain a RCRA "permit by rule" (under § 270.62) and by-pass the Parts 264 and 265 permitting process. Permits by rule have been granted by EPA to facilities already regulated and permitted under other Federal laws, provided that the facilities are in compliance with their permits and other specified requirements. For example, ocean disposal barges or vessels are granted permits by rule under RCRA § 270.60(a) for ocean dumping because those activities are already permitted under the authority of the Marine Protection, Research, and Sanctuaries Act, as amended U.S.C. 1420 *et seq.*

The commenters are requesting EPA to apply permits by rule in such a manner that could effectively exempt generators of 100–1000 kg/mo from Federal requirements. They have suggested that the proposed rule requiring full Part 264 and 265 standards for generators of 100–1000 kg/mo would be too burdensome. One commenter noted that a permit by rule would allow for relief from full RCRA requirements and thus allow for continued waste treatment/minimization activities on-site. The second commenter explained that 100–1000 kg/mo generators are already regulated under State and local environmental programs. This commenter suggested that permits by rule should be issued for generators of 100–1000 kg/mo who are in compliance with "adequate State and local environmental programs and permits."

EPA does not believe that it is appropriate to effectively exempt these generators from Parts 264 and 265. First of all, Congress explicitly directed EPA to require that wastes from these generators be managed at Subtitle C facilities. Second, EPA believes that compliance with the permitting process is essential to provide protection of human health and the environment. EPA disagrees that State and local regulatory programs for generators of 100–1000 kg/mo are sufficient to maintain proper protection of human health and the environment, since most State programs do not now require that such waste be managed at Subtitle C facilities. Of course, States with authorized RCRA programs may adopt equivalent (or broader or more stringent) requirements and administer State programs for these generators.

4. Modifications to Part A Permit Applications

One commenter questioned whether requiring revisions to Part A and Part B

permits for facilities handling waste from generators of 100–1000 kg/mo will be too time-consuming and may delay the implementation of the proposed rule.

EPA is aware that the rule promulgated today will require changes in the Part A applications for off-site facilities that manage wastes from 100–1000 kg/mo generators. As explained in the preamble to the proposed rule, off-site interim status facilities managing wastes from both fully regulated large quantity generators and generators of 100–1000 kg/mo may be required to modify their Part A permit applications under § 270.72 to account for wastes from 100–1000 kg/mo generators if those wastes are currently being managed as exempt pursuant to § 261.5 and are not currently identified on the Part A application. Thus, facilities that receive wastes from generators of 100–1000 kg/mo only, which previously were not required to fill out Part A forms under § 270.41 are now required to do so. Similarly, facilities that receive wastes from generators of 100–1000 kg as well as large quantity generators, must modify their permits to reflect the wastes received from 100–1000 kg/mo generators.

The Agency does not believe that the proposed changes requiring facilities receiving wastes from generators of 100–1000 kg/mo to add new information to Part A applications or requiring facilities to begin filing Part A applications will be overly time-consuming.

One commenter sought to clarify that facilities that only handle hazardous waste from generators who generate no more than 100 kg/mo will still operate under a blanket exemption from Part 264 and Part 265.

Under the Hazardous and Solid Waste Amendments of 1984, generators of less than 100 kg/mo and those treatment, storage, or disposal facilities that serve those generators will continue to operate under the conditional exemption from Part 264 and Part 265 that is contained in Section 261.5.

IV. Delayed Effective Dates

EPA proposed that the effective date of the regulatory requirements for 100–1000 kg/mo generators be six months from the date of promulgation of the rules. It was also proposed that the effective date of the Parts 264 and 265 facility standards for generators that manage waste on-site be delayed an additional six months, to become effective one year from the date of promulgation.

Of the four comments received on this issue, one opposed any delay in effective dates beyond March 31, 1986, on grounds that it is one of the hammer

provisions and would not be in the best interest of enforcement. Another commenter suggested a one year delay for all of the requirements. The Agency does not agree with either commenter. First, the plain language of section 3001(d)(9) states that the last sentence of section 3010(b), which allows for a less than six month effective date under certain circumstances, shall not apply to standards issued under section 3001(d). Thus, the language of the statute appears to preclude an effective date of less than six months. Although it is arguable that the statute and its legislative history indicate some intent that the regulations become effective immediately,⁵ the Agency believes that a better reading of the statute requires a delay in the effective date of the rules for at least six months.

Second, the Agency believes that a six month effective date for the generator requirements is essential from a policy perspective in order to allow these small businesses to become familiar with the hazardous waste regulations, obtain an EPA Identification number, and find hazardous waste transporters and Subtitle C management facilities. Finally, EPA has determined that the six month effective date is consistent with the statutory directive to promulgate rules for these generators that attempt to minimize the burden on small business. Thus, EPA believes that allowing six months for these generators to comply with most of the provisions of the newly applicable hazardous waste management system is a reasonable response to the directives of section 3001(d). As discussed below, the Agency does not believe, however, that a full year is needed for compliance with rules other than those relating to on-site waste management.

With regard to the additional six month delay for compliance with on-site management standards, one commenter supported the proposal while another opposed it as legally unjustifiable and not protective of public health. This commenter asserted that the effective

⁵ While the Agency does not believe that the hammer provisions in section 3001(d)(8) dictate the content of the final rules, it is arguable that a March 31, 1986 effective date was intended. The fact that Congress required final rules to be promulgated by March 31, 1986, under section 3001(d)(8), in conjunction with a statement in the Conference Report that the section 3010(b) six month delay in effective dates does not apply to 3001(d)(1) regulations (see H.R. Rep. No. 1133, 98th Cong. 2d Sess. 101 (1984)) raises some question regarding the applicability of the six month delay of section 3010(b). Since the plain meaning of the statutory language in section 3001(d)(9) is so clear, however, the Agency does not believe that the legislative history should prevail.

dates for on-site and off-site activities should be the same.

EPA disagrees that the effective dates for compliance must be the same for on-site and off-site management activities. The same concerns regarding undue burdens that would be imposed by an immediate effective date for the full set of regulations led the Agency to conclude that a reasonable period of time was necessary for on-site compliance with Parts 264 and 265.

Generators of 100-1000 kg/mo who engage in on-site management activities will generally have to change their waste management practices in more dramatic ways than those generators who simply ship their wastes for management off-site. Most will modify their current practices in one of the following ways: (1) By adopting on-site management practices exempt from Parts 264 and 265, (2) by shifting to off-site management practices, or (3) by adjusting any non-exempt on-site practices so they comply with the full Parts 264 and 265 facility standards. The delayed effective date will permit these generators to effect the necessary changes in a safe and effective manner. Under the final rule, 100-1000 kg/mo generators will have an additional six months to qualify for interim status and come into compliance with the Part 265 interim status facility standards if they manage their wastes on-site, as opposed to off-site. The interim status facility standards include a number of requirements that call for substantial time and investment, especially the requirement for implementation of a ground-water monitoring program. The installation, operation and maintenance of the monitoring system to determine impact on ground-water quality includes installation of wells, which will require some time to be constructed. In the meantime, there will be some protection to health and the environment by the need for approval by States for these generators to manage municipal or industrial (non-hazardous) solid waste.

Generators who manage their waste off-site will not need this additional time to comply with today's rule. In many cases, their current waste management practices will be allowed under this rule. Even if they must arrange for new off-site management, six months should be sufficient time for this transition.

Therefore, the Agency is retaining the proposed effective dates.

V. Impact on Authorized States

A. Applicability in Authorized States

Under Section 3006 of RCRA, EPA may authorize qualified States to administer and enforce their own

hazardous waste programs pursuant to Subtitle C (See 40 CFR Part 271 for the standards and requirements for authorization.) Following authorization, EPA retains enforcement authority under sections 3008, 3013 and 7003 of RCRA, although authorized States have primary enforcement responsibility.

Prior to the Hazardous and Solid Waste Amendments of 1984 (HSWA), a State with final authorization administered its hazardous waste program entirely in lieu of the Federal program. The Federal requirements no longer applied in the authorized State, and EPA could not issue permits for any hazardous waste management facilities which the State was authorized to permit. When new, more stringent Federal requirements were promulgated or enacted, the State was obligated to enact equivalent authority within specified time frames, however; the new Federal requirements did not take effect in an authorized State until the requirements were adopted as State law.

In contrast, under newly enacted section 3006(g) of RCRA, 42 U.S.C. 6926(g), new requirements and prohibitions imposed by the HSWA take effect in authorized States at the same time that they take effect in nonauthorized States. EPA is directed to carry out those requirements and prohibitions in authorized States, including the issuance of permits, until the State is granted authorization to do so. While States must still adopt HSWA provisions as State law to retain final authorization, the HSWA requirements apply in authorized States in the interim.

Today's final rule is promulgated pursuant to section 3001(d) of RCRA, a provision added by HSWA. Therefore, it is being added to Table 1 in § 271.1(j), which identifies the Federal program requirements that are promulgated pursuant to HSWA and that take effect in all States, regardless of their authorization status. States may apply for either interim or final status for the HSWA provisions identified in Table 1, as discussed in the following section of this preamble.

B. Effect on State Authorizations

As noted above, EPA will implement the standards in authorized States until they revise their programs to adopt these rules and the revisions are approved by EPA. Because the rule is promulgated pursuant to HSWA, a State submitting a program modification may apply to receive either interim or final authorization under section 3006(g)(2) or 3006(b), respectively, on the basis of requirements that are substantially equivalent or equivalent to EPA's. The

procedures and schedule for State adoption of these regulations under section 3006(b) are described in 40 CFR 271.21 (49 FR 21678, May 22, 1984). The same procedures should be followed for section 3006(g)(2).

Applying § 271.21(e)(2), States that have final authorization must modify their programs within one year from the date of today's promulgation of EPA's regulations if only regulatory changes are all that are necessary, or within two years if statutory changes are necessary. These deadlines can be extended in exceptional cases (40 CFR 271.21(e)(3)).

States with authorized RCRA programs may already have requirements similar to those in today's rule. These State regulations have not been assessed against the Federal regulations being promulgated today to determine whether they meet the tests for authorization. Thus, a State is not authorized to implement these requirements in lieu of EPA until the State program modification is approved. Of course, States with existing standards may continue to administer and enforce them as a matter of State law. In implementing the Federal program, EPA will work with States under cooperative agreements to minimize duplication of efforts. In many cases, EPA will be able to defer to States in their efforts to implement their programs rather than take separate action under Federal authority.

States that submit official applications for final authorization less than 12 months after today's promulgation of EPA's regulations could be approved without including standards equivalent to those promulgated. Once authorized, however, a State must modify its program to include standards substantially equivalent or equivalent to EPA's within the time period discussed above.

VI. CERCLA Impacts

Today's final rule does not change existing CERCLA requirements relating to releases of reportable quantities of CERCLA hazardous substances. Whenever a hazardous waste or waste stream is listed under section 3001 of RCRA, it automatically becomes a hazardous substance under section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). Section 103 of CERCLA requires that persons in charge of vessels or facilities from which hazardous substances have been released in quantities that are equal to or greater than the reportable quantities (RQs) immediately notify the National Response Center (NRC) (at (800)

424-8802 or (202) 426-2875) of the release. (See 50 FR 13456-13522, April 4, 1985).

The term "hazardous substance" includes all substances designated in § 302.4(a) of the April 4, 1985 final rule (50 FR 13474), as well as unlisted hazardous wastes exhibiting the RCRA characteristics of ignitability, corrosivity, reactivity, and extraction procedure toxicity. (See § 302.4(b) of the April 4, 1985 final rule.)

All persons who release a reportable quantity of a CERCLA hazardous substance into the environment, including small quantity generators, are subject to notification provisions of section 103 of CERCLA (see 40 CFR 302.6(a) and (b)). However, as stated in CERCLA section 103(f)(1), no notification shall be required under CERCLA sections 103(a) and (b) for any release of a hazardous substance which is required to be reported (or specifically exempted from a requirement for reporting) under subtitle C of the Solid Waste Disposal Act or regulations thereunder and which has been reported to the National Response Center (NRC).

VII. Executive Order 12291—Regulatory Impact

Executive Order 12291 (46 FR 13193, February 9, 1981) requires that a regulatory agency determine whether a new regulation will be "major" and if so, that a Regulatory Impact Analysis be conducted.

The Administrator has determined that today's final rule is not a major rule, because it has total estimated costs of less than \$100 million per year, and has no significant adverse economic effects. These conclusions, are based on an economic analysis of today's proposal. This analysis involved developing cost estimates of both current waste management practices used by 100-1000 kg/mo generators and practices required by today's final rule. Some of these estimates were firm-specific and others were waste stream-specific. These costs were used along with estimates of the changes in waste management practices likely to result from today's final rule to estimate the annual incremental compliance costs to 100-1000 kg/mo generators (\$46.9 million). These costs were added to the estimated government costs of implementing the regulation of \$12 million for a total social cost of \$58.9 million.

A. Estimates of Per Firm Costs

1. Part 262 Generator Standards

The estimated incremental compliance costs attributable to Part 262 requirements can be divided into an initial, one-time, cost of \$2267 per firm, and an annual recurring cost of \$222 per firm. These costs will be incurred by all

100-1000 kg/mo generators that would be subject to the requirements of today's regulation with two exceptions—generators disposing of their wastes by sending them to POTW's and generators that have their waste reclaimed under certain contractual agreements. Generators sending wastes to POTW's will incur no Part 262 related costs as a result of the regulation (unless the waste is accumulated prior to discharge; see 3.a. of this Unit). Generators using reclamation agreements would incur a cost of \$1694 initially and no annual costs.

2. Transportation Costs

Under today's rule, generators of 100-1000 kg/mo will be required to either contract with an authorized hazardous waste transporter or haul the hazardous waste to a hazardous waste management facility that has a permit from the Agency or an authorized State, or is in interim status. Incremental transport costs depend on current generator practices, the distance which wastes are transported, the quantity of wastes transported, and the number of times wastes are loaded and transported each year.

In many cases, there will be no incremental transportation costs due to these regulations because current waste management practices involve waste transportation. Where this is not the case, average incremental costs that would be imposed on 100-1000 kg/mo generators for the transportation of their hazardous waste are estimated to be between \$838 per year (for generators that ship 600 kg of waste a short distance twice yearly) and \$1882 per year (for generators that ship 6000 kg of waste a longer distance twice yearly).

3. Treatment, Storage and Disposal Costs

a. On-Site Accumulation: Under today's final rule, generators of 100-1000 kg/mo would be allowed to store hazardous waste on-site without a permit or interim status for up to 180 days, or for up to 270 days if the waste is to be shipped over 200 miles.

Generators of 100-1000 kg/mo who store hazardous waste on-site, within the 180-day (or 270-day) period specified under the provisions of the storage exemption, will have to comply with Part 265, Subpart C (Preparedness and Prevention), a reduced set of requirements in Subpart D (Contingency Plan and Emergency Procedures), and limited requirements for personnel training (Section 265.16 of Subpart B). The incremental compliance costs for facilities that choose this management option are divided into an initial start-up cost of \$1447 and an annual cost of \$53.

Generators that store hazardous waste on-site within the 180-day (or 270-

day) period may also incur costs related to storage container (Subpart I) and storage tank (Subpart J) requirements. The incremental costs for these requirements depend on a number of factors, including the current practices of the generator, the generator's storage capacity, and the composition of the hazardous waste being stored. The range of incremental costs, as a result, is fairly large. For container storage, initial incremental costs range from practically zero to \$1854 and annual costs range from \$404 to \$447. The corresponding incremental cost estimates for the existing rules for tanks are \$155 for initial costs, and \$770 for annual costs.

b. Treatment and Disposal: After analyzing the cost of on-site treatment and disposal for 100-1000 kg/mo generators relative to off-site costs, the Agency has determined that in nearly all cases, the least expensive hazardous waste management alternatives available to these generators involve off-site activities. The small quantities of waste generated by these establishments simply do not permit them to operate expensive on-site management facilities on an economically efficient basis. The costs of off-site commercial treatment and disposal upon which this conclusion is based are derived from a composite of various existing sources of data on commercial waste management prices. They range from \$150 to \$250 per metric ton (for secure landfills) to \$200 to \$1200 per metric ton (for either treatment or incineration), depending on the characteristics of the wastes.

B. Estimates of Nationwide Incremental Cost Burden on Generators of 100-1000 kg/mo

The aggregate costs for today's rule were developed by comparing the costs of current (baseline) management practices with hazardous waste management practices which are required by the rule. The Agency has determined, based on this analysis, that the annual incremental compliance cost for this proposal would be approximately \$46.9 million.

On a per metric ton basis, the average incremental compliance cost over all wastes is about \$180. Because of differences in baseline practices, and, hence, the cost of compliance, the incremental costs vary substantially among different wastes. In fact, the baseline method of waste management by these generators is adequate to comply with the regulations in many cases. Others will have to change waste management practices in order to comply. Much of the \$46.9 million in compliance cost, is focused on a few types of wastes (spent solvents dry cleaning filtration residues, acids, and

alkalies, and ignitable wastes) that constitute a large proportion of the wastes generated by these generators.

C. Estimates of the Economic Impacts of Today's Final Rule

An analysis of the effects of compliance costs on the sales and profitability of 289 model plants indicates that in over 80 percent of plants the incremental costs are less than 10 percent of profits. A few of the plants, particularly in service industries, show incremental costs of greater than 10 percent of profits. Nearly three quarters of the models most affected by the proposal have annual revenues of less than \$500,000. Some of these establishments are low profit or nonprofit by design, such as public or private golf courses, hospitals, and other public institutions.

Only six plants have incremental compliance costs which exceed 1 percent of sales and 25 percent of profits. For each of these model plants, a more detailed evaluation was conducted to determine whether these plants would be likely to close. This analysis indicated that plant closings as a result of this regulation would be unlikely.

VIII. Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), requires the Agency to evaluate the impacts of regulations on small businesses, small organizations and small governmental jurisdictions. The Regulatory Impact Analysis for today's final rule includes such an evaluation. The Administrator has determined that this regulation will not have a significant impact on a substantial number of small firms.

Today's proposed regulations are expected to primarily affect small firms. Therefore, the Regulatory Flexibility Act requirement concerning effects on small businesses is addressed to a large extent by the overall economic analysis performed in conjunction with this rulemaking.

Throughout the development of today's final rule, the Agency's goal has been promulgation of requirements that would be the least burdensome to small businesses and also meet the Congressional mandate of protecting human health and the environment. In our effort to design regulations that would meet this goal, we have worked closely with small business organizations, trade associations, State and local governments, EPA's Small Business Ombudsman in the Office of Small and Disadvantaged Business Utilization, and the Federal Small Business Administration to assess the needs and capabilities of small businesses. EPA believes that this rule is a balanced approach to regulating hazardous waste from these generators

while considering their small business nature.

For purposes of this analysis, "small entities" were defined as firms comprised of fewer than 50 employees for all of the sectors except manufacturing (<100 employees). In many cases, these classifications are approximations because the Small Business Administration establishes size standards in terms of sales levels, and the size standards vary within sectors. For example, most small entity size standards for manufacturing industries range between 500 and 1000 employees.

The results of this analysis indicate that less than 10 percent of small entities within the impacted industries will be affected by the regulations. Most small businesses will not be affected by these regulations because they: 1) Do not generate hazardous waste, 2) generate less than 100 kg/mo, or 3) generate over 1000 kg/mo and are already subject to hazardous waste regulations.

Even though only a relatively small percentage of potentially affected small businesses will probably be affected, the more important issue to analyze is whether or not a large number of those which are affected will be severely impacted. Three commonly accepted tests were used to measure whether or not businesses would be severely impacted:

(1) Annual compliance costs will increase the relevant production costs for small entities by more than five percent;

(2) Capital costs of compliance will represent a significant portion of the capital available to small entities,

(3) The costs of the regulation will likely result in closure of small entities.

To analyze the significance of compliance costs on small businesses, data were developed for 25 different types and sizes of model plants representing those most likely to be severely impacted by the proposed regulations. Compliance costs were computed for these model plants based on the economic analysis described in the previous section of this preamble.

In general, these regulations will not cause significant impacts on small firms. None of the model plants established for this analysis show cost increases of more than five percent as a direct result of compliance costs. The regulations require no significant capital outlays and thus should not affect capital requirements or availability. Even the most severely impacted model plants would not close under the assumptions of this exercise and would continue to operate at a profit.

In summary, it appears that the impact on small firms will not cause a significant number of hardships. There will be isolated cases, involving on-site

management or transportation over long distances, where compliance costs for some individual firms may be severe. In the case of on-site management, however, the Agency believes that most 100-1000 kg/mo generators will switch to off-site practices rather than face the high costs of obtaining interim status or a permit. Furthermore, approximately 70 percent of these generators are in metropolitan areas, and would thus be able to reduce transportation costs by allowing transporters to consolidate shipments by picking up waste from more than one generator at a time.

IX. Paperwork Reduction Act

The information collection requirements contained in this rule have been approved by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.*, and have been assigned OMB control numbers 2050-0028 (Notification) and 2050-0039 (Manifest).

List of Subjects

40 CFR Part 261

Intergovernmental relations, Hazardous materials, Waste treatment and disposal, Recycling.

40 CFR Part 262

Intergovernmental relations, Hazardous materials, Labeling, Packaging and containers, Reporting requirements, Waste treatment and disposal.

40 CFR Part 263

Intergovernmental relations, Hazardous materials transportation, Waste treatment and disposal.

40 CFR Part 270

Administrative practice and procedure, Confidential business information, Hazardous materials transportation, Hazardous waste, Reporting and recordkeeping requirements, Water pollution control, Water supply.

40 CFR Part 271

Administrative practice and procedure, Confidential business information, Hazardous materials transportation, Hazardous waste, Indian lands, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Water pollution control, Water supply.

Dated: March 14, 1986.,

Lee M. Thomas,
Administrator.

For the reasons set out in the preamble, Title 40 of the Code of Federal Regulations is amended, as follows:

PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

1. The authority citation for Part 260 continues to read as follows:

Authority: Secs. 1006, 2002(a), 3001 through 3007, 3010, 3014, 3015, 3017, 3018, 3019, and 7004, Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6921 through 6927, 6930, 6934, 6935, 6937, 6938, 6939, and 6974).

2. Section 260.10 is amended by adding a new definition, alphabetically, as follows:

§ 260.10 Definitions.

“Small Quantity Generator” means a generator who generates less than 1000 kg of hazardous waste in a calendar month.

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

3. The authority citation for Part 261 continues to read as follows:

Authority: Secs. 1006, 2002(a), 3001, and 3002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6921, and 6922).

4. Section 261.1 is amended by revising paragraph (a)(1) to read as follows:

§ 261.1 Purpose and scope.

(a) (1) Subpart A defines the terms “solid waste” and “hazardous waste”, identifies those wastes which are excluded from regulation under Parts 262 through 266 and 270 and establishes special management requirements for hazardous waste produced by conditionally exempt small quantity generators and hazardous waste which is recycled.

5. Section 261.5, is revised to read as follows:

§ 261.5 Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

(a) A generator is a conditionally exempt small quantity generator in a calendar month if he generates no more than 100 kilograms of hazardous waste in that month.

(b) Except for those wastes identified in paragraphs (e), (f), (g), and (j) of this section, a conditionally exempt small quantity generator's hazardous wastes are not subject to regulation under Parts 262 through 266 and Parts 270 and 124 of this chapter, and the notification requirements of Section 3010 of RCRA, provided the generator complies with

the requirements of paragraphs (f), (g), and (j) of this section.

(c) Hazardous waste that is not subject to regulation or that is subject only to § 262.11, § 262.12, § 262.40(c), and § 262.41 is not included in the quantity determinations of this Part and Parts 262 through 266 and 270 and is not subject to any of the requirements of those Parts. Hazardous waste that is subject to the requirements of § 261.6 (b) and (c) and Subparts C, D, and F of Part 266 is included in the quantity determination of this Part and is subject to the requirements of Parts 262 through 266 and 270.

(d) In determining the quantity of hazardous waste generated, a generator need not include:

- (1) Hazardous waste when it is removed from on-site storage; or
- (2) Hazardous waste produced by on-site treatment (including reclamation) of his hazardous waste, so long as the hazardous waste that is treated was counted once; or
- (3) Spent materials that are generated, reclaimed, and subsequently reused on-site, so long as such spent materials have been counted once.

(e) If a generator generates acute hazardous waste in a calendar month in quantities greater than set forth below, all quantities of that acute hazardous waste are subject to full regulation under Parts 262 through 266 and Parts 270 and 124 of this chapter, and the notification requirements of section 3010 of RCRA:

- (1) A total of one kilogram of acute hazardous wastes listed in §§ 261.31, 261.32, or 261.33(e).
- (2) A total of 100 kilograms of any residue or contaminated soil, waste, or other debris resulting from the clean-up of a spill, into or on any land or water, of any acute hazardous wastes listed in §§ 261.31, 261.32, or 261.33(e).

(f) In order for acute hazardous wastes generated by a generator of acute hazardous wastes in quantities equal to or less than those set forth in paragraph (e)(1) or (e)(2) of this section to be excluded from full regulation under this section, the generator must comply with the following requirements:

- (1) Section 262.11 of this chapter;
- (2) The generator may accumulate acute hazardous waste on-site. If he accumulates at any time acute hazardous wastes in quantities greater than those set forth in paragraph (e)(1) or (e)(2) of this section, all of those accumulated wastes are subject to regulation under Parts 262 through 266 and Parts 270 and 124 of this chapter, and the applicable notification requirements of section 3010 of RCRA. The time period of § 262.34(d) for accumulation of wastes on-site begins when the accumulated wastes exceed the applicable exclusion limit;

(3) A conditionally exempt small quantity generator may either treat or dispose of his acute hazardous waste in an on-site facility, or ensure delivery to an off-site storage, treatment or disposal facility, either of which is:

- (i) Permitted under Part 270 of this chapter;
- (ii) In interim status under Parts 270 and 265 of this chapter;
- (iii) Authorized to manage hazardous waste by a State with a hazardous waste management program approved under Part 271 of this chapter;
- (iv) Permitted, licensed, or registered by a State to manage municipal or industrial solid waste; or
- (v) A facility which:
 - (A) Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or
 - (B) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation.
- (g) In order for hazardous waste generated by a conditionally exempt small quantity generator in quantities of less than 100 kilograms of hazardous waste during a calendar month to be excluded from full regulation under this section, the generator must comply with the following requirements:

(1) Section 262.11 of this chapter;

(2) The conditionally exempt small quantity generator may accumulate hazardous waste on-site. If he accumulates at any time more than a total of 1000 kilograms of his hazardous wastes, all of those accumulated wastes are subject to regulation under the special provisions of Part 262 applicable to generators of between 100 kg and 1000 kg of hazardous waste in a calendar month as well as the requirements of Parts 263 through 266 and Parts 270 and 124 of this chapter, and the applicable notification requirements of section 3010 of RCRA. The time period of § 262.34(d) for accumulation of wastes on-site begins for a conditionally exempt small quantity generator when the accumulated wastes exceed 1000 kilograms;

(3) A conditionally exempt small quantity generator may either treat or dispose of his hazardous waste in an on-site facility, or ensure delivery to an off-site storage, treatment, or disposal facility, either of which is:

- (i) Permitted under Part 270 of this chapter;
- (ii) In interim status under Parts 270 and 265 of this chapter;
- (iii) Authorized to manage hazardous waste by a State with a hazardous waste management program approved under Part 271 of this chapter;
- (iv) Permitted, licensed, or registered by a State to manage municipal or industrial solid waste; or

- (v) A facility which:
 - (A) Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or
 - (B) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation.

(h) Hazardous waste subject to the reduced requirements of this section may be mixed with non-hazardous waste and remain subject to these reduced requirements even though the resultant mixture exceeds the quantity limitations identified in this section, unless the mixture meets any of the characteristics of hazardous waste identified in Subpart C.

(i) If any person mixes a solid waste with a hazardous waste that exceeds a quantity exclusion level of this section, the mixture is subject to full regulation.

(j) If a conditionally exempt small quantity generator's wastes are mixed with used oil, the mixture is subject to Subpart E of Part 266 of this chapter if it is destined to be burned for energy recovery. Any material produced from such a mixture by processing, blending, or other treatment is also so regulated if it is destined to be burned for energy recovery.

6. In Section 261.33 the introductory text of paragraph (f) is revised to read as follows:

**§ 261.33 Discarded commercial chemical products, off-specification species, container residues, and spill residues there-
of**

(f) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in paragraphs (a) through (d) of this section, are identified as toxic wastes (T), unless otherwise designated and are subject to the small quantity generator exclusion defined in § 261.5 (a) and (g).

PART 262—STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

7. The authority citation for Part 262 continues to read as follows:

Authority: Secs. 1006, 2002(a), 3002, 3003, 3004, and 3017 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6906, 6912(a), 6922, 6923, 6924, 6925, and 6937).

8. Section 262.20 is amended by adding new paragraph (e) to read as follows:

§ 262.20 General requirements.

(e) The requirements of this Subpart

do not apply to hazardous waste produced by generators of greater than 100 kg but less than 1000 kg in a calendar month where:

(1) The waste is reclaimed under a contractual agreement pursuant to which:

(i) The type of waste and frequency of shipments are specified in the agreement;

(ii) The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator is owned and operated by the reclaimer of the waste; and

(2) The generator maintains a copy of the reclamation agreement in his files for a period of at least three years after termination or expiration of the agreement.

9. Section 262.34 is amended by revising the introductory text to paragraph (a) and by adding new paragraphs (d), (e), and (f).

§ 262.34 Accumulation time.

(a) Except as provided in paragraphs (d), (e), and (f) of this section, a generator may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status provided that:

(d) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month may accumulate hazardous waste on-site for 180 days or less without a permit or without having interim status provided that:

(1) The quantity of waste accumulated on-site never exceeds 6000 kilograms;

(2) The generator complies with the requirements of paragraph (a)(1) except the generator need not comply with § 265.176.

(3) The generator complies with the requirements of paragraphs (a)(2) and (a)(3) of this section and the requirements of Subpart C of Part 265; and

(4) The generator complies with the following requirements:

(i) At all times there must be at least one employee either on the premises or on call (*i.e.*, available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified in paragraph (d)(3)(iv) of this section. This employee is the emergency coordinator.

(ii) The generator must post the following information next to the telephone:

(A) The name and telephone number of the emergency coordinator;

(B) Location of fire extinguishers and spill control material, and, if present, fire alarm; and

(C) The telephone number of the fire department, unless the facility has a direct alarm.

(iii) The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;

(iv) The emergency coordinator or his designee must respond to any emergencies that arise. The applicable responses are as follows:

(A) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;

(B) In the event of a spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil;

(C) In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include the following information:

(1) The name, address, and U.S. EPA Identification Number of the generator;

(2) Date, time, and type of incident (*e.g.*, spill or fire);

(3) Quantity and type of hazardous waste involved in the incident;

(4) Extent of injuries, if any; and

(5) Estimated quantity and disposition of recovered materials, if any.

(e) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and who must transport his waste, or offer his waste for transportation, over a distance of 200 miles or more for off-site treatment, storage or disposal may accumulate hazardous waste on-site for 270 days or less without a permit or without having interim status provided that he complies with the requirements of paragraph (d) of this section.

(f) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and who accumulates hazardous waste in quantities exceeding 6000 kg or accumulates hazardous waste for more than 180 days (or for more than 270 days if he must transport his waste, or offer his waste for transportation, over a distance of 200 miles or more) is an operator of a storage facility and is subject to the requirements of 40 CFR

Parts 264 and 265 and the permit requirements of 40 CFR Part 270 unless he has been granted an extension to the 180-day (or 270-day if applicable) period. Such extension may be granted by EPA if hazardous wastes must remain on-site for longer than 180 days (or 270 days if applicable) due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days may be granted at the discretion of the Regional Administrator on a case-by-case basis.

10. In Subpart D of Part 262, add the following new § 262.44:

Subpart D—Recordkeeping and Reporting

* * * * *

§ 262.44 Special Requirements for Generators of between 100 and 1000 kg/mo.

A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month is exempt from the requirements of this subpart, except for the recordkeeping requirements in paragraphs (a), (c), and (d) in § 262.40 and the requirements of § 262.43.

PART 263—STANDARDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE

11. The authority citation for Part 263 continues to read as follows:

Authority: Sections 2002(a), 3002, 3003, 3004, and 3005 of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976 and as amended by the Quiet Communities Act of 1978 (42 U.S.C. 6912(a), 6922, 6923, 6924, and 6925).

12. In § 263.20, paragraph (h) is added to read as follows:

§ 263.20 The manifest system.

* * * * *

(h) A transporter transporting hazardous waste from a generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous

waste in a calendar month need not comply with the requirements of this section or those of § 263.22 provided that:

(1) The waste is being transported pursuant to a reclamation agreement as provided for in § 262.20(e);

(2) The transporter records, on a log or shipping paper, the following information for each shipment:

(i) The name, address, and U.S. EPA Identification Number of the generator of the waste;

(ii) The quantity of waste accepted;

(iii) All DOT-required shipping information;

(iv) The date the waste is accepted; and

(3) The transporter carries this record when transporting waste to the reclamation facility; and

(4) The transporter retains these records for a period of at least three years after termination or expiration of the agreement.

PART 270—EPA ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM

13. The authority citation for Part 270 continues to read as follows:

Authority: Secs. 1006, 2002, 3005, 3007, 3019, and 7004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912, 6925, 6927, 6939, and 6974).

14. Section 270.1 is amended by revising paragraph (c)(2)(i) to read as follows:

§ 270.1 Purpose and scope of these regulations.

* * * * *

(c) * * *
(2) * * *

(i) Generators who accumulate hazardous waste on-site for less than the time periods provided in 40 CFR 262.34.

* * * * *

15. Section 270.10 is amended by adding paragraph (e)(1)(iii) to read as follows:

§ 270.10 General application requirements.

* * * * *

(e) * * *
(1) * * *

(iii) For generators generating greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and treats, stores, or disposes of these wastes on-site, by March 24, 1987.

* * * * *

PART 271—REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS

16. The authority citation for Part 271 continues to read as follows:

Authority: Secs. 1006, 2002(a), and 3006 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), and 6926).

17. Section 271.1(j) is amended by adding the following entry to Table 1 in chronological order by date of publication:

§ 271.1 Purpose and scope.

* * * * *

TABLE 1.—REGULATIONS IMPLEMENTING THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Date	Title of Regulation	Federal Register reference
Mar. 24, 1986.....	Regulations for Generators of 100-1000 kg/mo of Hazardous Waste.	51 FR [insert page number]

[FR Doc. 86-6224 Filed 3-21-86; 8:45 am]

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