

Registered for
Federal Order

FRIDAY, AUGUST 26, 1977

PART IV



**ENVIRONMENTAL
PROTECTION
AGENCY**

■

**NOISE EMISSION
STANDARDS FOR NEW
TRUCK-MOUNTED SOLID
WASTE COMPACTORS**

**ENVIRONMENTAL PROTECTION
AGENCY**

[40 CFR Part 205]

[FRL 762-8]

**NEW TRUCK-MOUNTED SOLID WASTE
COMPACTORS**

Noise Emission Standards

AGENCY: Environmental Protection Agency.

ACTION: Notice of proposed rulemaking.

SUMMARY: This notice proposes noise emission standards for truck-mounted solid waste compactors. This action is being taken under authority of the Noise Control Act of 1972. Compliance with the proposed standards should, on the average, reduce noise from new conventional truck-mounted solid waste compactors by from 4 to 8 decibels in 1979, and by an additional 3 decibels in 1982. In terms of reduced impact on the nation's population, these reductions, when considered in combination with existing Federal standards for new medium and heavy trucks, should result in a reduction of approximately 71 percent in the severity and extensiveness of noise impact due to solid waste collection by the year 1991. The estimated reduction in noise impact is due in approximately equal measure to the reductions in collection cycle noise brought about by the Federal noise regulation for medium and heavy trucks and to the additional noise reduction expected as a result of this proposed regulation.

DATES: The official docket (Docket Number ONAC 77-1) for the proposed noise emission regulation for Truck-Mounted Solid Waste Compactors will remain open for the submittal of comment until November 25, 1977. At that time, all materials submitted for the record, including transcripts of all public hearings, will become part of the official record. Public hearings will be held on September 27, 1977, commencing at 9:00 a.m. in the Americana City Squire Inn; 790 7th Avenue, New York, New York and on September 29, 1977, commencing at 9:00 a.m., in the Salt Palace, Salt Lake City, Utah.

ADDRESSES: Persons submitting written comments and/or wishing to make a statement at the public hearings should write to the following address:

Director, Standards and Regulations Division, Office of Noise Abatement and Control (AW-471), Truck-Mounted Solid Waste Compactor Docket No.: ONAC 77-1, U.S. Environmental Protection Agency, Washington, D.C. 20460.

FOR FURTHER INFORMATION CONTACT:

Mr. Fred Mintz, Program Manager, General Products Branch, at the above address or phone (703) 557-2710.

To receive copies of the Proposed Rule contact:

Mr. Charles Mooney, U.S. Environmental Protection Agency, EPA Public Information Center (PM-215), Room 2194 D Waterside Mall, Washington, D.C. 20460, (202) 755-0717.

SUPPLEMENTARY INFORMATION:

1.0 INTRODUCTION

Through the Noise Control Act of 1972, Pub. L. 92-574, 86 Stat. 1234 et seq. 42 U.S.C. 4901 et seq. (the "Act"), Congress established a National policy "to promote an environment for all Americans free from noise that jeopardizes their health and welfare." In pursuit of that policy, Congress stated, in section 2 of the Act, "that, while primary responsibility for control of noise rests with State and local governments, Federal action is essential to deal with major noise sources in commerce, control of which requires National uniformity of treatment."

As part of this Federal action, section 5(b) (1) of the Act requires the Administrator, after consultation with appropriate Federal agencies, to publish a report or series of reports "identifying products (or classes of products) which in his judgment are major sources of noise." The Administrator published in the FEDERAL REGISTER (40 FR 23105, May 28, 1975) a report which identified "truck-mounted solid waste compactors", a class of products in the surface transportation category, as a major source of noise. For brevity, this product may be referred to hereinafter as either "TMSWC", or "compactors."

Section 6(a) of the Act requires the Administrator to publish a proposed regulation for each product which is identified or which is part of a product class identified as a major source of noise, where in his judgment noise standards are feasible. Such regulations are to include standards that set limits on the noise emission from new products which are requisite to protect public health and welfare, taking into account the magnitude and conditions of use of such products (alone or in combination with other noise sources), the degree of noise reduction achievable through the application of the best available technology and the cost of compliance.

Section 6(d) (1) of the Act specifies that the manufacturer of each new product shall warrant to the ultimate purchaser and each subsequent purchaser that the product is designed, built, and equipped so as to conform at the time of sale with the regulation.

Under section 6(e) (1), no State or political subdivision thereof may adopt or enforce any law or regulation which sets a limit on noise emissions from new products regulated by EPA, unless such law is identical to the applicable EPA regulation. The requirement to be "identical" applies to the standard and those elements of the measurement methodology which define the standard; these must be identical to those in the EPA regulation. However, other elements of the State or local law need not be identical. Such elements include the list of persons

subject to the regulations, sanctions, enforcement procedures and correlatable or equivalent "short tests" used for enforcement purposes.

Section 6(e) (2) of the Act specifies that nothing in section 6 shall preclude or deny the right of any State or political subdivision thereof to establish and enforce controls on environmental noise and sources thereof through the licensing, regulation, or restriction of the use, operation, or movement of any product or combination of products. Such controls which are reserved to State and local authority under this section include, but are not limited to, the following:

- (1) Controls on the time of day during which products may be operated.
- (2) Controls on the places or zones in which products may be used.
- (3) Controls on the noise emission level of products during use and operation that are enforceable against the consumer.
- (4) Controls on the number of products which may be operated at the same time.
- (5) Controls on noise emission level from the properties on which products are used.
- (6) Controls on the licensing of products.
- (7) Controls on the manner of operation of products.

State and local time-of-sale noise emission regulations applicable to products which are not covered by Federal regulation are in no way preempted by these regulations.

Section 10 of the Act establishes prohibited acts in relation to products for which section 6 regulations are applicable. Distribution in commerce of any new product manufactured after the effective date of regulations pursuant to section 6, is prohibited, unless it is in conformity with such regulations. Removal or rendering inoperative of any device or element of design incorporated into any product in compliance with section 6 regulations, other than for purposes of maintenance, repair, or replacement, prior to its sale or delivery to the ultimate purchaser or while it is in use is prohibited. The use of a product which has been tampered with is also prohibited.

Section 11 of the Act specifies enforcement penalties for violation of any prohibited act under section 10. Such penalties for first violations include a fine of not more than \$25,000 per day of violation, or imprisonment for not more than one year, or both for knowing or willful violations. The penalties double for subsequent violations.

Section 13 of the Act provides the authority for the Administrator to require a manufacturer to establish and maintain records and make such reports and provide such information as is necessary for him to determine compliance.

Section 15 of the Act establishes a process by which the Federal Government will give preference in its purchas-

ing to products whose noise emissions are significantly below those required by the Federal noise emission standards promulgated pursuant to Section 6 of the Act. Accordingly, the EPA has published procedures for Certification of Low-Noise-Emission Products (LNEP) (40 CFR Part 203). For truck-mounted solid waste compactors, the specific noise emission level criteria required for LNEP determination are contained in § 205.202 (d) subpart F, of the proposed regulation, and are discussed in section 2 of this preamble.

Section 16(d) grants the Administrator the authority to issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents to assist him in obtaining information to carry out the purposes of the Act.

2.0 THE PROPOSED REGULATION

The proposed regulation will establish standards for noise emissions resulting from the operation of newly manufactured truck-mounted solid waste compactors. The proposed standard specifies the energy-averaged sound level, in dBA, measured at an 'on axis' distance of 7 meters (23 feet) from the front, rear, and sides of the truck-mounted solid waste compactor, using fast meter response. The measurement procedure used to obtain the data upon which the standards are based is presented in section 205.204 of the proposed regulation. A detailed technical discussion is contained in the "Environmental Impact Statement, Economic Impact Statement and Background Document for Noise Emission Standards for Truck-Mounted Solid Waste Compactors", referred to hereafter as the "Background Document."

The proposed regulation is established in two steps, the first step of which is to take effect January 1, 1979. The second step of the regulation is scheduled to become effective January 1, 1982, concurrently with the second step of the noise regulation for medium and heavy trucks (41 FR 15538, April 13, 1976). The reduced (80 dBA) sound level limit (at full throttle, maximum engine speed) for new trucks in 1982 should permit attainment of the reduced (75 dBA) limit (during the compaction cycle) for compactors with no additional application of noise control technology.

Effective on the dates listed, truck-mounted solid waste compactors shall not produce a sound level in excess of the level shown in Table 2-1, when operated and evaluated according to the methodology provided in § 205.204 of Subpart F.

TABLE 2-1—PROPOSED REGULATORY NOISE EMISSION STANDARDS

Effective date	Not-to-Exceed sound level
January 1, 1979.....	78 decibels.
January 1, 1982.....	75 decibels.

Machinery-related impulse¹ sounds shall not exceed the average sound level limits by more than 5 decibels.

¹ See discussion of impulse sounds unded 3.5.3.

To ensure lasting benefits from this proposed regulation, the Agency proposes to require that manufacturers design and build each product such that, when properly maintained and used, it will not degrade (increase) in sound level above the applicable levels in Table 2-1 for a specified period of time or use from the date of the product's delivery to the ultimate purchaser. This period is defined by the Agency as the Acoustical Assurance Period (AAP). In the case of truck-mounted solid waste compactors, the Acoustical Assurance Period is 3 years or 7500 operating hours, whichever occurs first.

A manufacturer must develop pursuant to section 205.208-4 of subpart F, an anticipated increase in the sound level of his products during the AAP. The manufacturer must take into account the increase in sound level, expressed as a Sound Level Degradation Factor (SLDF), when making test measurements to show compliance with the applicable standard. Accordingly, the manufacturer must show that his product conforms to a sound level limit defined by the applicable standard of Table 2-1 less the SLDF value.

The Administrator has determined, based upon studies of the noise control technology for compactors, that the proposed standards are feasible and represent those levels of noise requisite to protect the public health and welfare, taking into account the magnitude and conditions of use of such product (alone or in combination with other noise sources), the degree of noise reduction achievable through the application of the best available technology and the cost of compliance as required by section 6(c) (1) of the Noise Control Act.

A subsection of this regulation specifies a Low Noise Emission Product (LNEP) level of 70 dBA, effective January 1, 1978. Ordinarily the LNEP level is set 5 dBA below the regulatory limit, allowing 2 dBA for manufacturing variation and 3 dBA for improved performance. However, for compactors the LNEP level has been set at 70 dBA, 8 dBA below the initial regulatory limit. The reason for this choice is that certain gasoline-powered trucks which use front drive for the pumps, already are close to meeting a 73 dBA level, and therefore an LNEP level of 73 dBA would provide no incentive for further development of technology or acoustical quality control. In addition, there are indications that an electric truck of foreign manufacturers also can meet a 73 dBA limit readily (and possibly 70 dBA as well) so that a 73 dBA level would provide no incentive for improvement on this existing model.

The proposed regulation also incorporates an enforcement program which includes production verification, selective enforcement auditing procedures, warranty, maintenance, compliance labeling and anti-tampering provisions.

EPA is unaware at this time of any manufacturer who would be unable to comply with the proposed standards by the specified effective dates. The Agency

solicits submittal of such data or information during the public comment period that substantiates or refutes this view.

3.0 BACKGROUND INFORMATION

3.1 GENERAL

The proposed regulation is one of a series of surface transportation noise regulations to be proposed. In arriving at the proposed regulation, the Agency carried out detailed investigations of truck-mounted solid waste compactor design, manufacturing and assembly processes; available noise control technology; noise measurement methodologies; costs attendant to noise control methods; the cost to test machines for compliance; the cost of recordkeeping; possible economic impacts; and the potential environmental and health and welfare benefits associated with the application of various noise control measures. The information summarized briefly herein is presented in detail in the "Background Document".

To meet the requirements of the Act, to consider "the best available technology, taking into account the cost of compliance," the Agency constructed definitions of the terms "best available technology" and "cost of compliance." In doing so, the Agency carefully considered the strict language of the Act, its legislative history, and other relevant data. Based thereon, the following definitions have been established by the Administrator for the purposes of this regulation.

3.1.1 "Best available technology". EPA considers the level "achievable through the application of the best available technology" to be the lowest noise level which can be reliably predicted, based on engineering analysis of products subject to the standard, that manufacturers will be able to meet by the effective date, through application of currently known noise attenuation techniques and materials. In order to assess what can be achieved, EPA has (1) identified the sources of TMSWC noise and the levels to which each of these sources can be reduced, using currently known techniques; (2) determined the level of overall TMSWC noise that will result; (3) assured that such techniques may be applied to the general TMSWC population; (4) assured that such techniques are adaptable to production line assembly; and (5) assured that sufficient time is allowed for the design and application of this technology by the effective dates of the standards.

3.1.2 "Cost of compliance" is defined as the cost of identifying what action must be taken to meet the specified noise emission level, the cost of taking that action, any additional cost of operation and maintenance caused by that action, and costs of noise testing and record keeping required by the regulation.

3.1.3 To determine what constitutes the best available technology and the cost of compliance, the Agency amassed information from a range of sources including: (1) Studies performed by

PROPOSED RULES

Agency personnel; (2) studies performed under contract with the Agency; (3) submissions by other Federal agencies; (4) submission by industry; and (5) data in the available literature.

Representatives of the Agency carried out extensive interviews with key members of firms and trade associations in the TMSWC industry to gain first-hand knowledge of the industry and its products and to obtain and verify technological and financial information. Similar interviews were conducted with key persons in the solid waste collection and management industries, and State and local governments.

3.2 PRODUCT DEFINITION

A truck-mounted solid waste compactor is defined, for purposes of this regulation, as a vehicle comprising a mechanically powered truck cab and chassis or trailer, equipped with a body and machinery for receiving compacting, transporting, and unloading solid waste. The body, which includes a waste-receiving hopper, houses machinery which typically consists of hydraulic actuators (rams) with requisite hydraulic pump, valves, piping, and controls. The hydraulic actuators operate various components that sweep the waste matter into the container portion of the body and compact it. Power generally is drawn from the truck engine by means of a power take-off (PTO) unit, coupled by gears or other mechanical connection to the transmission, engine drive shaft, or fly wheel.

Truck-mounted solid waste compactors are used for the collection of solid wastes in residential and commercial areas. It is estimated that as of 1976 there were approximately 79,000 such units in use, distributed in the following categories:

	Units
Rear-loaders	57,700
Side-loaders	10,900
Front-loaders	10,400

3.2.1 Rear-loaders have a hopper at the rear into which waste materials are dumped by hand or from a container lifted by a winch or hydraulic lift. The waste is swept forward into the main body where it is compacted by hydraulically-operated blades. Rear-loaders typically are used in densely populated urban and suburban areas where handloading of trash generally is necessary.

3.2.2 Side-loaders have a body with openings on either side forward of the midsection. Waste materials are loaded either by hand or by means of a mechanical container lift, and compacted toward the rear by a ram-operated blade. Side-loaders are used mainly for collecting waste and trash in residential areas comprising one or two family housing units.

3.2.3 Front-loaders generally are used to collect waste from commercial facilities and residential apartment complexes. A front-loader is equipped with a pair of hydraulically-operated lifting arms which extend forward of the cab to pick up a specially-designed container. The container is lifted over the cab, in-

verted, and dumped through an opening in the top of the body into a receiving hopper; the container then is lowered to the ground and the waste is compacted toward the rear of the compactor body.

3.3 SOUND LEVEL DATA

The average maximum steady sound level of the various configurations of TMSWC, during their typical compaction cycles, are summarized in the following listing. The sound level listed for each configuration is the arithmetic means of the sound levels determined for each unit of that type using the measurement procedure outlined in section 3.5 of this preamble.

TYPE OF UNIT

Rear loaders:	
Conventional units, gasoline-powered	79.9
Conventional units, gasoline- ered	81.8
Quieted units, gasoline powered ..	74.0
Front loaders: Conventional units, diesel powered	
	83.8
Side loaders:	
Gasoline powered (1 unit)	77.0
Quieted, diesel powered (1 unit) ..	74.0

¹ Mean sound level of units of specified types dBA.

3.4 NOISE SOURCES IN TRUCK-MOUNTED SOLID WASTE COMPACTORS

The major sources of noise in TMSWC's may be categorized as:

Primary power supply: truck engine; auxiliary engine.

Power transmission features: transmission power take-off (PTO); flywheel PTO; front PTO; other.

Mechanical features of compactor: hydraulic system; container loading system (winch, hydraulic lift); compactor actuation mechanism (ram); hopper closure.

Although not readily susceptible to categorization, other noise sources occur in the operation of a TMSWC including truck brake squeal, the hiss of brake air release, waste compaction related noise, and impulse noises due to impacts between components of the compacting machinery and to banging of cans or containers against the hopper walls by collection personnel. The first type, i.e. machinery-related impacts, can be controlled by design, and the regulation addresses this type. The second type, although partially controllable by use of rubber or similar materials at impact areas, is due mainly to operating practices and the design of containers. Control of this type of impulse noise will depend on appropriate industry practices, with guidance or incentive provided by local regulations regarding waste collection practices and container materials and design.

3.4.1 Primary Power Supply. Truck engines, the primary power source for most compactors may be either gasoline or diesel-fueled. Auxiliary engines, which provide the power on a few units, also may be gasoline or diesel, but generally are gasoline fueled. An electrically-powered truck has appeared on the European market, but is not yet available in the United States.

3.4.2 Power Transmission. A power take off unit, mounted to (1) the engine transmission, (2) the engine flywheel, or (3) connected to the front end of the engine crankshaft, transfers engine power to the hydraulic pump(s) which energizes the compactor's hydraulic system.

3.4.3 Loading Devices. Two types of hydraulically driven container-loading devices are used: mechanical linkages and winches. The front-loader employs a complex, powerful mechanical linkage system which is essential to its operation. Side-loaders and rear-loaders may have either mechanical linkages or winches, but are generally loaded by hand.

3.4.4 Compaction Devices. The compaction of waste materials in front- and side-loaders is achieved through the use of a pusher blade or ram that spans the compactor body and is swept the length of the body by means of a telescoping hydraulic cylinder. Rear-loaders generally use an articulated blade to compact the waste in the hopper and sweep it forward into the body. Other types of compacting mechanisms or principles also may be used. One design employs a rotating auger-like device. Another has a cylindrical body with internal helical ribs that shred and propel the waste materials forward as the cylinder rotates.

3.5 NOISE MEASUREMENT PROCEDURES

3.5.1 Compactor load. There is some evidence that the quantity and type of waste materials loaded in a compactor body affect the noise emission characteristics of the unit in the compacting operation. However, to avoid the difficulties inherent in attempting to define and use a reproducible load of waste materials (standard compactor load), EPA has selected a load condition of no waste material as being the most suitable one for use in measuring the noise emissions of a compactor. This easily controlled and reproducible condition provides a consistent standard for comparison of all types of compactor units. The data collected by EPA has enabled the Agency to establish a correlation between the noise emissions measured in this manner and the noise emitted by TMSWC's in use during a typical collection and compaction process.

3.5.2 Engine Speed. The noise of a truck-mounted solid waste compactor increases markedly with the speed of the engine that powers the compactor. Some units use an engine speed governor, i.e., speed control device, during the compaction cycle to obtain the desired operating conditions and cycle time. If the unit is equipped with such a governor, then the noise measurements are to be made at governed speed, with automatic operation. If the unit is not so equipped, then the noise measurement is to be made at the maximum allowable speed in revolutions per minute (rpm) of the engine or the hydraulic pump, whichever is the lower.

3.5.3 Measurement criteria. During operation of a truck-mounted solid waste compactor, two general types of noise occur. One is a continuous sound due to

operation of the engine, PTO, hydraulic pump and compacting mechanisms throughout the compaction cycle (or loading and compaction cycle if a container is involved). The level of this sound may vary during the compaction cycle. A continuous noise of this type is characterized well by the A-weighted sound level, measured on a Sound Level Meter that meets type 1 criteria of ANSI Standard S1.4-1971, using the "fast" meter response. Accordingly, the noise measurement procedure in this regulation calls for observation (or recording) of the average maximum A-weighted sound level, in decibels, that occurs during normal operation of the compactor.

The second type of noise is generally due to impacts between metal parts of the compactor mechanism, e.g., ram cylinder and stop or between a trash container and the compactor walls or blade. The Agency has determined that the A-weighted energy in the impulse, averaged over a 0.125 second time interval, is an appropriate measure of an impulsive sound. This quantity is approximated well by a sound level reading using fast meter response.

3.5.4. Measurement Procedure. The noise sources of a truck-mounted solid waste compactor are found at various locations on the vehicle. To take account of these diverse locations, multiple measurement positions are necessary. However, to provide a measurement procedure that is reasonably simple to carry out and not excessively costly, it is desirable to use the minimum number of measurement positions that will define the sound emissions with acceptable accuracy and repeatability.

Two important aspects of microphone location are the distance of the microphone from the noise source, and the size of the clear test area required to obtain a measurement without significant sound reflections or other interferences.

In addition, the possibility of applying a simplified version of the measurement procedure for in-use enforcement measurements on urban streets suggests the desirability of a relatively close microphone position, because of space and building separation factors.

Consideration of the foregoing factors, discussed in detail in the Background Document, has led the Agency to adopt a measurement procedure for acquiring sound level data on compactor vehicles based on four microphone positions located 7 meters (23 feet) "on axis" from the front, rear, and side surfaces of the vehicle. The measurement obtained at each microphone location is the A-weighted sound pressure level, or sound level, L , in decibels, frequently abbreviated as dBA. The sound levels measured at these four microphone locations are combined on an energy averaged basis.

4.0 RATIONALE FOR STANDARD SELECTION

In arriving at the proposed standards, the Agency examined the various types of residential neighborhoods in which the truck-mounted solid waste compactor contributes to environmental noise. Studies were conducted to determine the

contribution by the truck-mounted solid waste compactor to total residential neighborhood noise associated with operation of these units. These investigations indicate that the truck-mounted solid waste compactor is a significant contributor to noise caused annoyance and probability of sleep and speech interference, in urban neighborhoods.

The Agency examined the technology, costs, and economic impact to achieve various reduced noise levels of truck-mounted solid waste compactors. (See section 5.2 of this preamble.) The noise levels examined ranged in value from the present mean levels for the various configurations (from 74 to 84 dBA) to 70 dBA measured at 7 meters. Estimates of the costs to quiet compactor trucks were developed from engineering cost data provided by industry and independent Agency estimates, taking into consideration industry accounting practices and list prices of solid waste compactors.

The Agency also examined the health and welfare benefits that various levels of reduced noise emissions from truck-mounted solid waste compactors would provide to the noise-impacted population. The public health and welfare impact associated with these proposed regulations has been assessed in terms of the number of people impacted by the noise of truck-mounted solid waste compactors, the severity of impact, and the noise impact relief that would be achieved by quieting the compactors. Since the truck engine is a major source of compactor noise, these assessments have taken into account the benefits independently resulting from EPA's recently promulgated regulations, for new medium and heavy trucks.

The benefits attendant to the study levels were assessed using a "fractional noise impact" method. This method determines impact in terms of both extensiveness (i.e., the number of people impacted) and the intensiveness (severity) of impact. Analyses were performed to determine the total potential benefits from the regulation of compactor noise in combination with medium and heavy trucks which are already subject to Federal noise emission standards.

In order to quantify the public health and welfare impact, the number of people impacted at noise exposure levels above $L_{dn}=55$ were determined and weighting factors were applied to account for severity of exposure. The result was a series of measurements of benefit in terms of reduction in extensiveness and severity of impact relating to annoyance, possibility of sleep and speech interference, and related factors.

The attainment of the estimated health and welfare benefits from reduction in the noise levels of compactors is dependent on the continued compliance of these products with the Federal not-to-exceed noise emission standard. To ensure that manufacturers develop and apply durable sound reduction measures to their products, the Agency believes it is necessary to establish a specific period of time or use during which newly manufactured products must, as a min-

imum requirement, comply with the Federal standard. It is the Agency's opinion that this time period should be of a duration that is commensurate with average major component repair, replacement or product overhaul time periods. The Agency believes that if a truck-mounted solid waste compactor complies with the standard during this initial period (the Acoustical Assurance Period), it is unlikely that the noise emissions of the compactor will degrade (increase) above the standard for the remainder of the expected life of the product: *Provided*, That the product is properly maintained and used. This places a burden on several parties. First, it requires the manufacturer to design and build the product so that if it is properly maintained and operated, the product will be capable of performing at or below the requisite sound level, and second it relies on the owner/user to properly maintain and use the product. (The responsibility of the owner/user is discussed in other portions of this preamble; see discussion of antitampering *infra*.)

The Agency considers the concept of an Acoustical Assurance Period necessary because if the product is not built such that it is even minimally capable of meeting the standard while in use over this initial period, when properly used and maintained, then the standard itself becomes a nullity and the anticipated health and welfare benefits become illusory.

The Agency considers the concept reasonable because, in the information available to the Agency, it finds little evidence that the noise levels of compactors will increase significantly over the initial 3 years or 7500 operating hours when the product is properly used and maintained.

In making the determination that the Acoustical Assurance Period for truck-mounted solid waste compactors should be 3 years or 7500 operating hours, EPA took into account the degree and conditions of use of these products, the best maintenance practices attendant to noise control, and the cost of compliance. Among specific factors considered were:

1. The likelihood that acoustical degradation of noise control features and the resultant increase in noise level above the standard would not occur during the Acoustical Assurance Period if the manufacturer uses proper design and quality materials and workmanship;

2. The maintenance normally required on compactors during their early years of use;

3. The relative usage cycles of these products during their early years of use.

It is important to understand what AAP means to the manufacturer. The manufacturer will be held responsible for producing a product that is capable of meeting the standard. He can design and build the product at the level of the standard assuming no degradation in noise control features with time, or build it with noise levels somewhat below the standard to account for some degradation with time. But in neither event can the product exceed the stand-

ard during the Acoustical Assurance Period.

In fact, in assessing the noise control technology which is needed for compliance with the proposed compactor standards, the Agency found no components which cannot be built to assure minimal or no degradation (increase) in the compactor's sound level, provided that the compactor is well maintained and is operated in a manner consistent with the manufacturers instructions. The compactor industry has stated that it strives to produce a long lasting, durable product by using component parts of high quality and compactor designs which can withstand extensive use. As a result, the Agency has concluded that the AAP requirement will not impose additional maintenance or equipment costs over those already estimated as attributable to the proposed regulation.

EPA is also proposing a procedure whereby the manufacturer must account for sound level degradation in his compliance testing and verification program by applying a Sound Level Degradation Factor (SLDF) to the noise emission standard. This may result in a manufacturer-specific production test level which is lower than that specified by the standard. For example, if a manufacturer estimates that the noise level of his product may increase 3 dBA during the AAP the SLDF would be 3 dBA. Then, for production verification (discussed below), the manufacturer would have to establish that the sound level of his product is 3 dBA lower than that specified by the standard. If a product is not expected to degrade during the AAP, the SLDF would be near or equal to zero. It is EPA's evaluation that in most cases the SLDF would be near or equal to zero.

Manufacturers would be subject to Federal enforcement actions consistent with section 11 of the Noise Control Act if the noise emission level during the AAP exceeds the noise emission standard. It should be clearly understood that this concept does not impose any additional burden on the manufacturer for proper maintenance and use. That is, if the product is not properly maintained and used the manufacturer is relieved of subsequent resulting liability. The responsibility of properly maintaining and using the product rests with the owner/user.

EPA invites comments on the approach it has taken to attain the health and welfare benefits requisite to this regulatory action. EPA also solicits comments on the length of the AAP together with the rationale and data to support the position taken.

5.0 ESTIMATED IMPACT OF PROPOSED REGULATION

5.1 HEALTH AND WELFARE.

The EPA estimates that approximately 17 million persons currently are exposed to residential neighborhood noise levels due to operation of truck-mounted solid waste compactors at noise exposure levels above $L_{dn} = 55$. It is estimated that compliance of compactors with the proposed standards will result

in a reduction in the number of persons so exposed to about 6 million persons by 1991, representing about a 65 percent decrease.

As pointed out in section 4.0, the reduction in extensiveness and severity of impact can be evaluated in terms of effects due to individual noisy events, such as sleep and speech interference, as well as effects due to generalized annoyance which can be assessed by reductions in L_{dn} . Detailed information on these impacts is provided in the Background Document. From fractional impact analysis of general annoyance, EPA estimates that the "equivalent number of persons impacted" will decrease from about 1,600,000 in the base year, 1976, to about 470,000 persons in 1991, a relative change in impact of about 71 percent. Part of the estimated reduction in impact is due to the effect of recently promulgated noise standards for medium and heavy trucks; in 1991, the reduced truck noise alone accounts for a reduction of 600,000 equivalent persons impacted. The balance of the estimated reduction, 530,000 equivalent persons, is due entirely to the compactor noise regulation.

Recognition of the intrusive nature of TMSWC noise impact led the Agency to a single-event noise exposure analysis for assessing the health and welfare impact of TMSWC noise control. The benefits of the proposed compactor noise regulation in terms of reduction of single-event impacts, relate to sleep awakening, sleep disturbance, and speech interference. For example, the estimated number of probably sleep disruption events (and similarly for speech interference occurrences) decreases from about 32 million in 1976 to about 7.4 million in 1991 as a result of the regulation.

The foregoing figures indicate that major reductions in health and welfare impact will result from promulgation of the proposed compactor noise regulation. These health and welfare benefits due to reduced trash collection noise will be additive to the benefits obtained as a result of reduced urban noise brought about by the medium and heavy truck noise regulation.

5.2 COST AND ECONOMIC IMPACT.

The cost impact of quieting compactors to meet the proposed regulatory standard may be expressed in terms of increased list price. The Agency's studies indicate that average list price increases for the compactor-truck assembly will range from 6.4 to 12.8 percent, depending on machine type and size, resulting in overall average list price increase of about 10.3 percent for all regulated machines. There are indications that a few small firms in the industry, by virtue of their small market share and related financial and operation factors, would incur higher manufacturing costs resulting in slightly higher list price increases. The Agency will continue to study these potential impacts because it is desirable to achieve the public health and welfare goals of the Act with minimal disruptive impacts from EPA noise regulations. The

price elasticity of demand for this equipment is -1.0 (or smaller) which could possibly result in a decrease in demand of 9 percent; manufacturers' total revenues should remain essentially unchanged because of price increases. Some pre-buying is expected to occur prior to the effective date(s) of the regulation. However, the Agency believes this activity will be limited by the available excess production capacity of about 4,000 units, almost entirely rear loaders.

In terms of societal resources, capital costs for the first year of compliance are estimated at about \$27 million, with annual costs (including amortized capital cost, operation and maintenance) at \$6.5 million. Costs are expected to pass through to the end user, and ultimately the consumer, of waste collection services. Because equipment costs represent a small portion of the total costs of solid waste collection the consequent cost increase for service is expected to be small, an estimated 0.5 percent or less.

Other aspects of potential economic impact due to promulgation of this regulation are detailed below.

1. *Impacts on manufacturers and employment.* Employment is not expected to change significantly. It is possible that from one to three manufacturers of truck-mounted solid waste compactor bodies may cease production of that line of equipment due to industry pressure and competition. Persons who might be affected by such reduction of production amount to less than two percent of the employed population of about 2900 persons within the industry and produce less than three percent of the total units estimated. An offsetting increase in employment is expected to occur due to testing and compliance activity and procurement of noise control components and materials resulting from the regulation.

2. *Impacts on Exports and Imports.* As the noise control treatment generally represents add-on materials or substitute components, or both, machines for export generally can be produced without noise control treatment, if desired. Units produced solely for export need not comply with U.S. noise standards; consequently, impact on exports should be minimal. With respect to imports, the regulation will apply to imported compactors. Consequently, domestic and foreign manufacturers will be affected equally, no adverse competitive impact will result and, therefore, the proposed regulation should have no appreciable impact on the U.S. balance of payments.

3. *Impact on energy use and costs.* The changes in compactor operating conditions associated with the noise control treatment are expected to result in an annual fuel savings of approximately \$95 per unit. This should provide a net savings in operating costs, taking into account possible increases in maintenance costs.

5.3 SUMMARY

The Agency has concluded that at this time the regulatory levels and schedule selected represent optimal noise reduc-

tion standards for truck-mounted solid waste compactors. Implementation of the regulations is expected to result in a substantial reduction in the number of people impacted by compactor noise.

Technology to achieve the selected levels has been demonstrated, and the effective dates for the noise level limits are coordinated with those for the truck noise standards. The Agency believes that the time schedule for application of the noise standards, corresponding with reduced noise limits for trucks, should allow the manufacturers the lead time requisite to incorporate the necessary design and component changes without production or market disruption.

The cost of compliance and possible economic impacts have been considered and are believed to be reasonable.

6.0 ENFORCEMENT

6.1 GENERAL

The EPA enforcement strategy places a major share of the responsibility on the manufacturers for pre-sale testing to determine the compliance of truck-mounted solid waste compactors with these regulations and noise emission standards. This approach leaves the manufacturer in control of many aspects of the compliance program and imposes a minimal burden on the industry. The effectiveness of this strategy necessitates monitoring by EPA personnel of the tests conducted and actions taken by the manufacturers in compliance with this regulation.

The enforcement strategy proposed in this regulation consists of three parts: (1) Production Verification, (2) Selective Enforcement Auditing, and (3) In-Use Compliance.

6.2 PRODUCTION VERIFICATION (PV)

PV is the testing by a manufacturer of early production models of a category or configuration of the product, and submitting a report of the results to the EPA. This process, using the proposed methodology, gives the EPA some assurance that the manufacturer has the requisite noise control technology in hand and the capability to apply it to the production process. Models selected for testing must have been assembled using the manufacturer's normal assembly method and must be units assembled for sale.

PV does not involve any formal EPA approval or issuance of certificates subsequent to manufacturer testing. The proposed regulations would require that prior to the distribution in commerce of any regulated product, that product must undergo production verification. Section 205.205-2(a) would allow a conditional and temporary waiver of this requirement under special circumstances. Responsibility for testing lies with the manufacturer. However, the Administrator reserves the right to be present to monitor any test (including simultaneous testing with Agency equipment) or to require that a manufacturer ship products for testing to the EPA's Noise Enforcement Facility in Sandusky, Ohio, or

to any other site the Administrator may find appropriate.

The basic production unit selected for testing purposes is a product configuration, which is a set of compactors grouped together on the basis of parameters proposed in § 205.205-3.

The manufacturer would be required to verify production products of each configuration. The regulation allows manufacturers to group configurations into categories based on the parameters proposed in § 205.205-2 and to verify by category. This is done by selecting the configuration in each category that has the highest level of noise emissions at the end of its defined Acoustical Assurance Period (based on tests or on engineering judgment). If when tested in accordance with the test procedure, that configuration does not exceed a noise level defined by the new product standard minus that configuration's expected noise degradation over its Acoustical Assurance Period, then all configurations in that same category are considered production verified.

The Administrator also reserves the right to test products at a manufacturer's test facility using either Agency equipment or the manufacturer's equipment. This will provide the Administrator an opportunity to determine that the manufacturer's test facility and test equipment meet the specifications proposed in § 205.204. If it is determined that the facility or equipment does not meet these specifications, the Administrator may disqualify them from further use for testing under this subpart.

Under § 205.206(a)(1), the Administrator may require that manufacturers submit to the Agency any product tested or scheduled to be tested pursuant to this regulation or untested products at such time and place as he may designate.

If a manufacturer proposes to add a new configuration to his product line or change or deviate from an existing configuration with respect to any of the parameters which define a configuration, the manufacturer must verify the new configuration either by testing a product and submitting data or by filing a report which demonstrates verification on the basis of previously submitted data. A manufacturer may production verify a configuration at any time during the model year or in advance of the model year if desired.

Production verification is an annual requirement. However, the Administrator, upon request by a manufacturer, may permit the use of data from previous production verification reports for specific configurations or categories.

Production verification performed on the early production models demonstrates that the models conform to the applicable noise emission standard and limits the possibility that non-conforming products are distributed in commerce. Because the possibility still exists that subsequently produced compactors may not conform, selective enforcement auditing (SEA) testing is incorporated in this proposed regulation.

6.3 SELECTIVE ENFORCEMENT AUDITING

Selective enforcement auditing (SEA) is the testing of a statistical sample of assembly line (production) products from a specified product configuration or category to determine whether these products comply with the applicable noise emission standards.

SEA testing is initiated when a test request is issued to the manufacturer by the Assistant Administrator for Enforcement or his designated representative. The test request will require the manufacturer to test a batch of products of a specified category or configuration produced at a specified plant. An alternative category or configuration may be designated in the event that products of the first category or configuration are not available for testing.

The SEA plan employs a technique known as inspection by attributes. The basic criterion for acceptance or rejection of a batch is the number of sample products in the batch which meet the standard rather than the average noise level of the products tested.

A sequential batch sampling inspection plan will be used for SEA testing. Sequential sampling differs from single sampling in that small test samples are drawn from consecutive batches and tested sequentially until a statistically significant conclusion can be drawn rather than one large sample being drawn and tested all at once. It offers the advantage of keeping the number of products tested to a minimum when the majority of products are meeting the standards.

A batch will be defined as the number of products produced during a time period specified in the test request. This will allow the Administrator to select batch sizes small enough to keep the number of products to be tested at a minimum and still to draw statistically valid conclusions about the noise emission performance of all products in that category or configuration.

The sampling plans proposed in this regulation are arranged according to the size of the batch from which a sample is to be drawn. Each plan specifies the sample size and the acceptance and rejection number for the established acceptance quality level (AQL). This AQL is the maximum percentage of products exceeding the applicable noise emission standard that for purposes of sampling inspection can be considered satisfactory. An AQL of 10% was chosen for compactors to take into account some test variability. The number of failing products in a sample is compared to the acceptance and rejection numbers for the appropriate sampling plan. If the number of failures is less than or equal to the acceptance number, then there is a high probability that the percentages of noncomplying products in the batch is less than the AQL and the batch is accepted. If the number of failing products is greater than or equal to the rejection number, then there is a high probability that the percentage of non-complying products in the batch is

PROPOSED RULES

greater than the AQL and the batch fails.

Since the sampling strategy involves a multiple sampling plan, in some instances the number of failures in a test sample may not allow acceptance or rejection of a batch so that continued testing may be required until a decision can be made to either accept or reject a batch.

When a batch sequence is tested and accepted in response to a test request, the testing is terminated. When a batch sequence is tested and rejected, the manufacturer must cease introducing these products into commerce. If the manufacturer desires to continue production and introduction into commerce of the failed configuration (category), this may be done provided that, under proposed § 205.207-8, all of the products in that category or configuration produced at that plant are tested. The manufacturer may then distribute the individual products that pass the test.

Regardless of whether a batch is accepted or rejected, failed products would have to be repaired or adjusted and pass a retest before they can be distributed in commerce.

The manufacturer can request a hearing on the issue of non-compliance of the rejected category or configuration.

Since the number of compactors tested in response to a test order may vary considerably, a fixed time limit cannot be placed on completing all testing. The proposed approach is to establish a limit on test time per product. It is estimated that manufacturers can test a minimum of five (5) products per day. However, manufacturers are requested to present any data or information that may effect a revision of this estimate.

6.4 ADMINISTRATIVE ORDERS

Section 11(d)(1) of the Act provides that: "Whenever any person is in violation of section 10(a) of this Act, the Administrator may issue an order specifying such relief as he determines is necessary to protect the public health and welfare."

This provision grants the Administrator discretionary authority to issue remedial orders to supplement the criminal penalties of section 11(a). The proposed regulation provides for several types of orders in specified circumstances: (1) Recall orders for failure of products to comply with the regulation (§ 205.209); (2) cease-to-distribute orders for products not properly production verified (§ 205.205-10); and (3) cease-to-distribute orders for failure to test (§ 205.207-9).

In addition, 40 CFR § 205.4(f) provides for cease-to-distribute orders for substantial infractions of regulations requiring entry to manufacturers' facilities and reasonable assistance. These provisions do not limit the Administrator's authority to issue orders, but give notice of cases where such orders would in his judgment be appropriate. In all such cases notice and opportunity for a hearing will be given.

6.5 COMPLIANCE SECTION

The proposed regulation requires that subject compactors be labeled to provide notice that the product complies with the noise emission standard. The label shall contain a notice of tampering prohibitions. The label also contains the effective date of the standard to which the product complies. The EPA is considering requiring that the actual not-to-exceed level of the standard be stated on the label. This would be intended to aid State and local officials in field testing and enforcement of complementary in-use standards. Specific comments on the advantages and disadvantages of including the level of the standard on the compliance label are solicited from all concerned parties. A coded rather than actual date of manufacture has been provided for so as to avoid possible disruption of marketing and distribution patterns.

6.6 IN-USE COMPLIANCE

In-use compliance provisions are included in proposed §§ 205.208-1, 205.208-2, and 205.208-3 to ensure that compactor noise levels are reasonably maintained for the life of the product provided that the compactors are properly maintained, used and repaired. These provisions include a requirement that the manufacturers provide a time-of-sale warranty to purchasers, assist the Administrator in defining those acts that constitute tampering, and finally provide purchasers with instructions specifying the maintenance, use, and repair required to minimize or negate degradation during product use. It should be noted that the warranty is a time-of-sale warranty. Section 6 of the Act requires that a manufacturer warrant to the ultimate purchaser and all subsequent purchasers that at the time-of-sale the product was designed, built, and equipped to comply with the regulations. A warranty claim can be made by a purchaser at any time throughout the actual life of the product so long as it relates back to a non-compliance at the time-of-sale.

6.7 ACOUSTICAL ASSURANCE PERIOD

The manufacturer must design products which will meet the noise standard for the period of time specified as the Acoustical Assurance Period beginning at the date of sale to an ultimate purchaser. EPA does not specify what testing or analysis a manufacturer must conduct to determine that compactors will meet the Acoustical Assurance Period requirement. However, under proposed § 205.208-4, the manufacturer is required to make a determination regarding the expected degradation and to maintain records of the test data or other information upon which the determination was based. This determination may be based on information such as tests of critical noise producing or abatement components, rates of noise control deterioration, engineering judgments based on previous experience, and physical durability characteristics of the product or product components.

The mechanism used in this regulation to express the amount of expected degradation, if any, is the sound level degradation factor (SLDF). The SLDF is the degradation (increase in A-weighted sound level which the manufacturer expects will occur on a configuration during the period of time specified as the Acoustical Assurance Period. The manufacturer must determine an SLDF for each product configuration. SLDF for each product configuration.

To ensure that the products will meet the noise standard throughout the Acoustical Assurance Period, proposed § 205.202(c)(2) requires the product to emit a time-of-sale noise level less than or equal to the new product noise emission standard minus the SLDF. In no case shall this noise level exceed the Federal noise standards; i.e. a negative SLDF may not be used. Production verification and selective enforcement audit testing both embody this principle.

If the product's noise level is not expected to deteriorate during the Acoustical Assurance Period when properly used and maintained, the SLDF is zero. If a manufacturer determines that a product configuration will become quieter during the period, the configuration must still meet the standard at the time of sale and an SLDF of zero must be used for that configuration.

It may be that most of the data required to determine an SLDF will already be in the hands of the manufacturer since this information is typically used for general product development work. In any event, EPA is not now proposing to require long term durability tests to be run as a matter of course.

6.8 APPLICABILITY OF PREVIOUSLY PROMULGATED REGULATIONS

Manufacturers who will be subject to the proposed regulation must also comply with the general provisions of 40 CFR Part 205 Subpart A. These include the requirements for inspection and monitoring of manufacturer's actions taken in compliance with the proposed regulation and the requirements for requesting and granting exemptions from this proposed regulation.

Manufacturers producing products subject to the proposed regulation may also be subject to selective enforcement auditing under the Medium and Heavy Duty Truck regulations of 40 CFR Part 205 Subpart B, as subsequent manufacturers. Comments are invited as to each of the above points.

A more detailed description of the enforcement regulation may be found in the Background Document.

7.0 FUTURE INTENT

The Agency is pursuing a strategy through which major contributors to overall residential neighborhood noise will be identified and subsequently regulated. This coordinated approach is necessary because, in residential neighborhoods, a number of different noise sources may be operating at the same time and the quieting of only one such source may not in itself be sufficient to reduce the noise in residential neighbor-

hoods to a level the Agency believes is requisite to protect the public health and welfare.

As indicated in the first EPA Identification of Major Sources of Noise Report (39 FR 22297-99, June 21, 1974), the principal candidates for potential future regulatory efforts are known.

The Agency has underway, or intends to commence, further regulatory action on other noise sources. These include wheel and crawler tractors, buses, motorcycles, pavement breakers and rock drills, and lawnmowers. The levels chosen for the time-phased standards in this proposed rulemaking, while believed to be optimal at present, may be lowered in the future, to be consistent with the overall objective to quiet all major noise sources in order to reduce noise in residential areas.

The Agency believes that the standards here proposed are necessary to protect the public health and welfare and are achievable by the best available technology taking into account the cost of compliance. However, as technological advances occur lower levels may be achievable with such advanced technology. The Agency will consider all new information and data which become available or are presented to it, and may subsequently revise the regulation proposed herein.

8.0 PUBLIC COMMENT

The Agency is committed by statute and policy to public participation in the decision making process for its environmental regulations. Accordingly, EPA encourages and solicits communications and contributions to the public docket on all aspects of the proposed rulemaking, including the identification of truck-mounted solid waste compactors as a major source of noise under section 5 (b) (1) of the Act, (40 FR 23107, May 28, 1975). These contributions are desired from as many diverse views as possible. When received, such information will be fully analyzed and any appropriate changes in the proposed rules will be made and explained in the promulgation of final regulation.

All interested parties are invited to attend public hearings concerning the proposed noise emission regulation for truck-mounted solid waste compactors. Hearings will be held on September 27, 1977, commencing at 9 a.m., in the Americana City Squire Inn, 790 7th Avenue, New York, N.Y., and on September 29, 1977, commencing at 9 a.m., in the Salt Palace, Salt Lake City, Utah. Persons wishing to present their views at either public hearing should notify the Director, Standards and Regulations Division, at the address specified at the beginning of this notice no later than September 9, 1977, so that presentations may be scheduled. It is requested that presentations be limited to 20 minutes to enable all prescheduled persons an opportunity to speak and to permit a question and answer period following each presentation. To the extent that time permits, persons who have not given notice of their intent to speak will be heard fol-

lowing the scheduled statements. It is requested that speakers submit, if practicable, five (5) copies of their statement to the Director, Standards and Regulations Division, prior to the hearing date.

9.0 BACKGROUND DOCUMENT

The EPA has determined that this document contains a major proposal requiring preparation of an Economic Impact Statement under Executive Order 11821 as amended by Executive Order 11949 and OMB Circular A-107 and certifies that an Economic Impact Statement has been prepared.

The document entitled "Environmental Impact Statement, Economic Impact Statement and Background Document for Noise Emission Standards for Truck-Mounted Solid Waste Compactors" may be obtained from:

U.S. Environmental Protection Agency, EPA Public Information Center (PM-215), Room 2194D, Waterside Mall, Washington, D.C. 20460. Secs. 6, 10, 11, 13, and 15, Noise Control Act, Pub. L. 92-574, 86 Stat. 1237, 1242, 1244, and 1245 (42 U.S.C. 4905, 4909, 4910, 4912, and 4914).

Dated: August 12, 1977.

DOUGLAS M. COSTLE,
Administrator.

In consideration of the foregoing, it is proposed to amend Part 205 by adding Subpart F as follows:

Subpart F—Truck-Mounted Solid Waste Compactors	
Sec.	
205.200	Applicability.
205.201	Definitions.
205.202	Noise emission standards.
205.203	Maintenance of records; submittal of information.
205.204	Test procedures.
205.205	Production verification.
205.205-1	General requirements.
205.205-2	Production verification: Compliance with standards.
205.205-3	Configuration identification.
205.205-4	Production verification report: Required data.
205.205-5	Test sample selection.
205.205-6	Test preparation.
205.205-7	Testing.
205.205-8	Addition of, changes to and deviation from a compactor configuration during the year.
205.205-9	Production verification based on data from previous years.
205.205-10	Cessation of distribution.
205.205-11	Labeling-compliance.
205.206	Testing by the Administrator.
205.207	Selective enforcement auditing requirements.
205.207-1	Test request.
205.207-2	Test sample selection.
205.207-3	Test sample preparation.
205.207-4	Testing procedures.
205.207-5	Reporting of the test results.
205.207-6	Acceptance and rejection of batches.
205.207-7	Acceptance and rejection of batch sequence.
205.207-8	Continued testing.
205.207-9	Prohibition of distribution in commerce; manufacturer's remedy.
205.208	In-use requirements.
205.208-1	Warranty.
205.208-2	Tampering.
205.208-3	Instructions for maintenance, use and repair.

Sec.	
205.208-4	Sound level degradation factor (SLDF) and retention of durability data.
205.209	Recall of non-complying compactors.

Appendix I.

AUTHORITY: Sec. 6, Noise Control Act (42 U.S.C. 4095) and additional authority as specified.

Subpart F—Truck-Mounted Solid Waste Compactors

§ 205.200 Applicability.

(a) Except as otherwise provided for in these regulations the provisions of this subpart apply to any truck mounted solid waste compactor (hereinafter compactor) which meets the definition of the term "new product" in the Act.

(b) The provisions of the subpart do not apply to: (1) Non-compacting vehicles that pick up solid waste containers; (2) Non-compacting collection vehicles; (3) Stationary trash compactors; (4) Solid waste containers.

§ 205.201 Definitions.

(a) As used in this subpart, all terms not defined herein shall have the meaning given them in the Act or in other subparts of this part.

(1) "Acceptable Quality Level" (AQL) means the maximum percentage of failing compactors that, for purposes of sampling inspection, can be considered satisfactory as a process average.

(2) "Acceptance of a batch" means that the number of non-complying compactors in the batch sample is less than or equal to the acceptance number as determined by the appropriate sampling plan.

(3) "Acceptance of a batch sequence" means that the number of rejected batches in the sequence is less than or equal to the acceptance number as determined by the appropriate sampling plan.

(4) "Acceptance of a compactor" means that the measured emissions of the compactor when measured in accordance with the applicable procedure, as delineated in this subpart, conform to the applicable standard.

(5) "Batch" means the collection of compactors of the same category or configuration as designated by the Administrator in a test request, from which a batch sample is to be drawn, and inspected to determine conformance with the acceptability criteria.

(6) "Batch size" means the number as designated by the Administrator in the test request of compactors of the same category or configuration in a batch.

(7) "Batch sample" means the collection of compactors of the same category or configuration which are drawn from a batch.

(8) "Batch sample size" means the number of compactors of the same category or configuration in a batch sample.

(9) "Category" means a group of compactor configurations which are identical in all material aspects with respect to the parameters listed in § 205.205-2.

PROPOSED RULES

(10) "Compactor" means a truck mounted solid waste compactor, which comprises an engine powered truck cab and chassis or trailer, equipped with machinery for receiving, compacting, transporting and unloading solid waste.

(11) "Configuration" means the basic classification unit of a manufacturer's product line and is comprised of all compactor designs, models or series which are identical in material aspects with respect to the parameters listed in § 205.205-3.

(12) "Exhaust system" means the system comprised of a combination of components which provide for enclosed flow of exhaust gas from engine exhaust port to the atmosphere.

(13) "Failing compactor" means that the measured emissions of the compactor when measured in accordance with the applicable procedure, as delineated in this subpart, exceed the applicable standard.

(14) "Inspection criteria" means the rejection and acceptance numbers associated with a particular sampling plan.

(15) "Model year" means the manufacturer's annual production period which includes January 1 of such calendar year: *Provided*, That if the manufacturer has no annual production period, the term "model year" shall mean the calendar year.

(16) "Noise control system" includes any part, component or system the primary purpose of which is to control or cause the reduction of noise emitted from a compactor.

(17) "Noise emission test" means a test conducted pursuant to the measurement methodology specified in this subpart.

(18) "Production verification compactor" means any compactor selected for testing, tested or verified pursuant to the production verification requirements of this subpart.

(19) "Rejection of a batch" means the number of non-complying compactors in the batch sample is greater than or equal to the rejection number as determined by the appropriate sampling plan.

(20) "Rejection of a batch sequence" means that the number of rejected batches in a sequence is equal to or greater than the rejection number as determined by the appropriate sampling plan.

(21) "Shift" means the regular production work period for one group of workers.

(22) "Tampering" means those acts prohibited by section 10(a)(2) of the Act.

(23) "Test compactor" means a compactor in a test sample or a production verification compactor.

(24) "Test sample" means the collection of compactors from the same category or configuration which is drawn from the batch sample and which will receive noise emission tests.

(25) "Test sample size" means the number of compactors of the same category or configuration in a test sample.

(26) "Low Noise Emission Product" (LNEP) means any product which emits

noise in amounts significantly below the levels specified in noise emission standards under the applicable regulation.

(27) "Sound Level Degradation Factor" (SLDF) means the increase in A-weighted sound level which the product configuration is projected to undergo during the Acoustical Assurance Period when properly maintained and used.

(28) "Warranty" means the warranty required by section 6(d)(1) of the Act.

§ 205.202 Noise emission standards.

(a) *Time-of-sale standard.* Truck-mounted solid waste compactors which are manufactured after the dates listed below shall be designed, built, and equipped so that at the time of sale they will not produce sound emissions in excess of the limits specified for the dates listed.

Effective date:	Maximum steady sound level limit
January 1, 1979.....	78 decibels.
January 1, 1982.....	75 decibels.

Machinery-related impulse sounds shall not exceed the maximum steady sound level limits by more than 5 decibels.

(b) The standards set forth in paragraph (a) of this section refer to the sound emissions as measured in accordance with the procedures prescribed in § 205.204.

(c) *In-Use Standard.* Following the effective date of the applicable standard, truck-mounted solid waste compactors shall continue to meet the standard for an Acoustical Assurance Period of 3 years or 7500 operating hours after sale to the ultimate purchaser, provided that the product is properly maintained and used in accordance with manufacturers' recommendations: *And provided*, That there has been no tampering with noise control components. At the time of product verification (PV) testing in § 205.205 and selective enforcement auditing (SEA) testing in § 205.207, new truck mounted solid waste compactors must comply with the standards set forth in paragraph (a) of this section minus the sound level degradation factor (SLDF) developed in accordance with § 205.208-4.

(d) *Low Noise Emission Product.* For the purpose of Low-Noise-Emission-Product Certification (LNEP) pursuant to 40 CFR Part 203, truck mounted solid waste compactors subject to this subpart which are procured after January 1, 1978, shall not emit noise in excess of 70 dBA when determined in accordance with the procedures prescribed in § 205.204. LNEP products must meet all requirements contained in paragraph (c) of this section.

(Sec. 10, 15 of the Noise Control Act (42 U.S.C. 4909, 4914).)

§ 205.203 Maintenance of records: submission of information.

(a) Except as otherwise provided for in the regulation, the manufacturer of any new compactor subject to any of the standards or procedures prescribed in this subpart shall establish, maintain and retain the following adequately organized and indexed records:

(1) General records: (i) Identification and description by category and

configuration parameters of all compactors composing the manufacturer's product line for which testing is required under this subpart and the identification and description of all devices incorporated into the compactor for the purpose of noise control and attenuation.

(ii) A description of any procedures other than those contained in this regulation used to perform noise tests on any test compactor.

(iii) A record of the calibration of the acoustical instrumentation as is required by § 205.204.

(iv) A record of the date of manufacture of each compactor subject to this part, keyed to the serial number or other coded identification contained on the label affixed to each compactor pursuant to § 205.205-11.

(2) Individual records for test compactors:

(i) A complete record of all noise emission tests performed for PV and SEA (except tests performed by EPA directly), including all individual worksheets and/or other documentation relating to each test, or exact copies thereof.

(ii) A record and description of all repairs, maintenance and other servicing performed on PV and SEA test products giving the date and time of the maintenance or service, the reason for it, the person authorizing it, and the names of supervisory personnel responsible for the conduct of the maintenance or service.

(3) A properly filed production verification report following the format prescribed by the Administrator in § 205.205-4 fulfills the requirements of paragraphs (a)(1)(i), (ii), (iii), and (a)(2)(i) and (ii) of this section.

(4) All records required to be maintained under this part shall be retained by the manufacturer for a period of three (3) years from the production verification date. Records may be retained as hard copy or alternatively reduced to microfilm, punch cards, etc., depending on the record retention procedures of the manufacturer; however, if an alternate method is to be used, all required information shall be retained relative to that alternative method.

(b) The manufacturer shall, pursuant to a request made by the Administrator, submit to the Administrator the following information with regard to new compactor production:

(1) Number of compactors, by category or configuration, scheduled for production for the time period designated in the request.

(2) Number of compactors, by category or configuration, produced during the time period designated in the request.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.204 Test procedures.

Conformity of compactors with the standards specified in § 205.202 shall be determined according to the test procedures specified in this section.

(a) *General.* This section prescribes the conditions under which noise emission standard compliance testing shall be conducted and the measurement pro-

cedures that shall be used to measure the sound level and to calculate the average sound level of truck-mounted solid waste compactors for which the test is conducted.

(b) *Test site description.* The test site shall consist of an open area above a hard reflecting plane. The reflecting plane shall consist of a surface of sealed concrete or sealed asphalt, shall be flat with ± 0.05 meters, and shall extend 1 meter beyond each microphone location. No reflecting surface such as a building, signboard, hillside, etc. shall be located within 15 meters of a microphone location.

(c) *Measurement equipment.* The measurement equipment to be used during noise standard compliance testing shall consist of the equivalent of the following:

(1) Sound level meter and microphone system conforming to the Type I requirements of American National Standards Institute (ANSI) S1.4.1971, "Specification for Sound Level Meters".

(2) As an alternative to making direct measurements using a sound level meter, a microphone or sound level meter may be used with a magnetic tape recorder and/or a graphic level recorder or indicating meter, providing the system meets the requirements of SAE Recommended Practice J184, Qualifying a Sound Data Acquisition System.

(3) A windscreen shall be employed with the microphone during all measurements of compactor noise when the wind speed exceeds 11 km/hr (7 mph). The windscreen shall not affect sound levels from the compactor in excess of 0.5 decibel.

(4) The entire acoustical instrumentation system including the microphone and cable shall be calibrated before and after each test series. A sound level calibrator accurate within ± 0.5 dB shall be used to calibrate the acoustic measuring system. A calibration of the instrumentation shall be performed at least annually using methodology of sufficient precision and accuracy to determine compliance with ANS S1.4-1971 and IEC 179. This calibration shall consist, at a minimum, of an overall frequency response calibration and attenuator (gain control) calibration plus a measurement of dynamic range and instrument noise floor.

(5) An anemometer or other device accurate to within ± 10 percent shall be used to measure wind velocity.

(6) An indicator accurate to within ± 2 percent shall be used to measure speed in RPM of the engine used as a prime mover for the compactor operation.

(7) A barometer accurate to within ± 5 percent shall be used for measuring atmospheric pressure.

(8) A stopwatch having an accuracy of better than 1 percent shall be used to measure time intervals.

(9) A thermometer accurate to within ± 1 degree shall be used to measure ambient temperature.

(d) *Microphone locations.* The microphone shall be located 1.2 ± 0.1 meters

($4 \text{ ft} \pm \frac{1}{2} \text{ ft}$) above the ground plane and 7 ± 0.3 meters (23 feet ± 1 ft) from the mid-point of the surface of the truck on the side on which the measurements are being made. Measurements will be made at four microphone positions to the front, rear and each side of the vehicle. (See Figure 1 for layout of microphones at test site.)

(e) *Test conditions.* Noise standard compliance testing shall be carried out under the following conditions:

- (1) Zero rain or other precipitation.
- (2) Wind speed less than 19 km/hr.
- (3) No observer located within 2 meters in any direction of any microphone

location, nor shall any person be located between the test machine and microphone(s).

(4) The reflecting plane, described in paragraph (b) of this section, shall be free of flowing or standing water, snow or other covering and any extraneous materials such as gravel.

(5) Sound levels produced by the test compactor shall be at least 10 dB greater than the test site background sound level.

(f) *Test procedure.* (1) The waste compactor equipment shall be operated with the vehicle stationary.

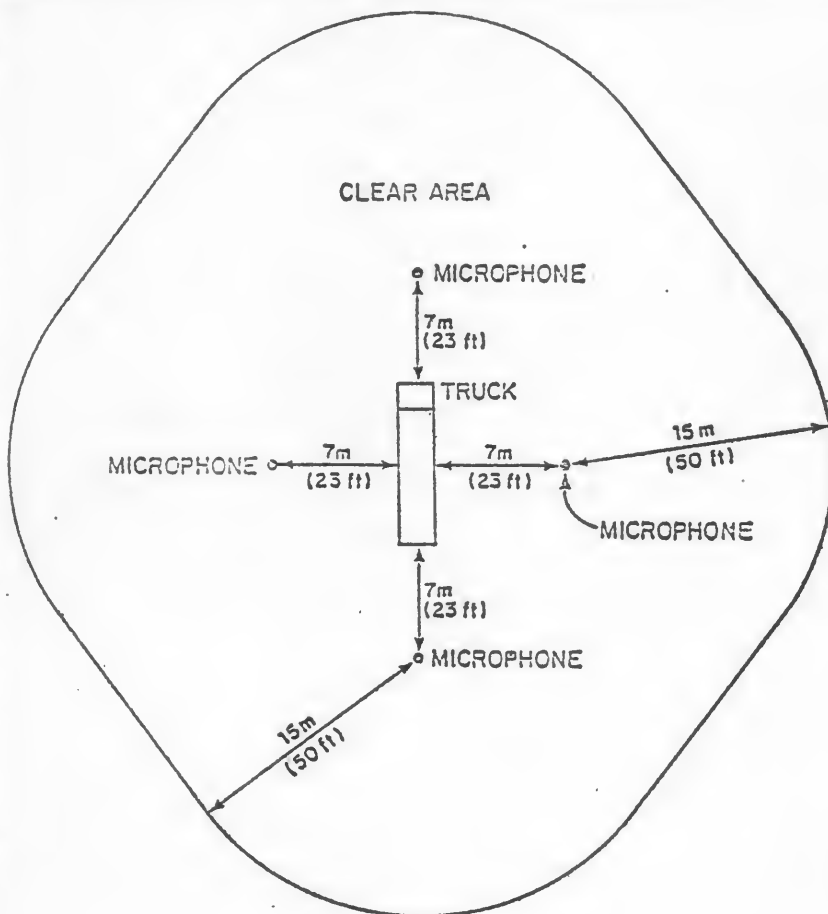


Figure 1 Noise Measurement Site

(2) The vehicle engine will be started and allowed to reach its recommended operating temperature. In addition, if the ambient temperature is below 60°F, the compaction equipment will be operated for enough cycles to allow the hydraulic oil and components to reach a stable operating temperature.

(3) The compaction equipment shall be operated empty. Trucks which normally load containers will be measured loading an empty container.

(4) The compaction equipment shall be operated in accordance with its normal operating procedures. The truck engine will be operated at its speed which is governed for the cycle or, if there is no such speed, the maximum allowable engine or pump speed, whichever is lower.

(5) The waste compaction equipment shall be run through two complete compaction cycles for each noise measurement taken. If the readings differ by more than 2 dB, further readings will be

PROPOSED RULES

taken until two agree within 2 dB and the average will be taken.

(6) The meter shall be set for "fast" response and on the "A" weighting network.

(7) Waste compaction equipment cycling noise. The waste compaction equipment will be operated through its normal cycle. The maximum sound level, ignoring any peaks due to impacts, will be recorded with the meter set for "fast" response and "A"-weighting.

(8) Waste compaction equipment impact noise. The waste compaction equipment will be operated through its normal cycle. The peak sound level due to impacts will be recorded with the meter set for "fast" response and "A"-weighting.

(9) The waste compaction equipment will be operated through its normal cycle. The time from the beginning to the end of the cycle will be recorded.

(10) Sound level measurements shall be taken at each of the four microphone positions around the vehicle and the following data will be reported:

(i) Maximum sound level during the compaction and operating cycle at each location, ignoring impacts.

(ii) Maximum impact sound level.

(iii) The four-location energy average for each of the above two data categories computed according to the equation.

$$\bar{L} = 10 \log \left(\sum_{i=1}^4 10^{L_i/10} \right) - 6 \text{ dB}$$

where:

\bar{L} = average sound level, in decibels L_i is the A-weighted sound level corresponding to the i 'th microphone location.

(iv) Cycle time.

(g) The Administrator may approve applications from manufacturers for the use of test procedures which differ from those contained in this subpart so long as the alternate procedures have been demonstrated to correlate with the prescribed procedure. To be acceptable, alternate testing procedures shall be such that the test results obtained will identify all those test units which would not comply with the noise emission limit prescribed in § 205.202 when tested in accordance with the procedures contained in § 205.204-1(a). Tests conducted by manufacturers under approved alternate procedures may be accepted by the Administrator for all purposes, including, but not limited to, production verification testing and selective enforcement audit testing.

(h) *References.* Suggested reference material is as follows:

- ANSI S1.1-1960 Acoustical Terminology.
- ANSI S1.2-1967 Physical Measurement of Sound.
- ANSI S1.4-1971 Specifications for Sound Level Meters.
- SAE Recommended Practice J-184—Qualifying a Sound Data Acquisition System.

Requests for copies of these documents should be addressed to the American National Standards Institute, Inc., 1430 Broadway, New York, N.Y. 10018; or The Society of Automotive Engineers, Incorporated,

Two Pennsylvania Plaza, New York, N.Y. 10001.

§ 205.205 Production verification.

§ 205.205-1 General requirements.

(a) Every new compactor manufactured for distribution in commerce in the United States which is subject to the standards prescribed in this subpart and not exempted in accordance with § 205.5:

(1) Shall be verified in accordance with the production verification procedures described in this subpart;

(2) Shall be represented in a production verification report, as required by § 205.205-4;

(3) Shall be labeled in accordance with the requirements of § 205.205-11 of this subpart; and

(4) Shall conform to the applicable noise emission standards established in § 205.202 of this regulation.

(b) The requirements of paragraph (a) of this section apply to the new products at the time they first conform to the definition of compactors in this regulation. The responsibility for complying with the requirement of paragraph (a) of this section rests with the manufacturer of the new product at the time the product first conforms to the definition of truck-mounted solid waste compactor in this regulation.

(c) Subsequent manufacturers of a new product which conforms to the definition of truck mounted solid waste compactors in this regulation when received by them from a prior manufacturer, need not fulfill the requirements of paragraph (a) (1), (2) or (3) of this section where such requirements have already been complied with by a prior manufacturer: *Provided*, That such subsequent manufacturing does not constitute tampering as defined pursuant to § 205.208-2.

(Secs. 10 and 13 of the Noise Control Act (42 U.S.C. 4909, 4912).)

§ 205.205-2 Production verification: compliance with standards.

(a) (1) Prior to distribution in commerce of a compactor of a specific configuration, the first manufacturer of such compactor must verify such configuration in accordance with the requirements of this subpart. However, production verification of a configuration is automatically and conditionally waived by the Administrator without request by a manufacturer for a period of up to 45 consecutive days from the date of distribution in commerce by a manufacturer of the first compactor of that configuration, in order to enable a manufacturer to distribute compactors in commerce pending compliance and to avoid disruption of the manufacturing process. To qualify for such waiver, a manufacturer must conduct any tests required in paragraphs (b) or (c) of this section as soon as weather conditions at a manufacturer's test facility permit after distribution in commerce of the first compactor of a configuration. Such conditions must be documented by the manufacturer and provided to the Administrator on request.

Failure to test on such first day will result in automatic and retroactive rescission of the waiver and will render the manufacturer liable for illegal distribution of products in commerce.

(2) At the completion of any 45-day period, the conditional waiver granted under paragraph (a) (1) of this section is rescinded for that configuration unless the manufacturer has complied with the requirements of paragraphs (b) or (c) of this section as appropriate; except that, upon application by a manufacturer and a showing that the weather conditions at the manufacturer's test facility or other conditions beyond the control of the manufacturer made it impossible to conduct the required testing, and that documentation of such conditions is submitted by the manufacturer, the Administrator at his option may extend for a specified period (not to exceed 45 days) conditional production verification for a configuration to enable the manufacturer to comply with the requirements of paragraph (b) or (c) of this section; or he may require pursuant to § 205.207 that the manufacturer ship the test compactor to the EPA test facility for testing by the Administrator.

(b) The production verification requirements with regard to each compactor configuration consist of:

(1) Testing in accordance with § 205.204 of a compactor selected in accordance with § 205.205-5;

(2) Compliance of the test compactor with a sound level such that the arithmetic addition of the Sound Level Degradation Factor (SLDF, determined in accordance with § 205.208-4) to that sound level does not exceed the applicable standards, when tested in accordance with § 205.204.

(3) Submission of a production verification report pursuant to § 205.205-4.

(c) (1) In lieu of testing products of every configuration as described in paragraph (b) of this section, the manufacturer may elect to verify the configuration based on representative testing, the requirements of which consist of:

(i) Grouping configurations into a category where each category will be determined by a separate combination of at least the following parameters (a manufacturer may use more parameters):

(A) Truck Engine Fuel Type: (1) Gasoline; (2) Diesel; (3) Other.

(B) Truck Engine Type: (1) Piston; (2) Rotary; (3) Turbine; (4) Other.

(C) Compactor Type: (1) Front Loader; (2) Side Loader; (3) Rear Loader.

(D) Compactor Power System: (1) Direct Drive; (2) Auxiliary Engine; (3) Power Take Off: (i) Transmission Mounted; (ii) Crankshaft Mounted; (iii) Flywheel Mounted.

(E) Hydraulic Power System (1) Pump;

(ii) (A) Identifying the configuration within each category which emits the highest sound level (in dBA) at the end of the defined Acoustical Assurance Period based on best technical judgment, emission test data, or both;

(B) If two or more configurations would emit the same sound level de-

scribed in (c) (1) (ii) (A) of this section, then identifying the configuration that emits the highest sound level when distributed into commerce;

(iii) Testing in accordance with § 205.204 of a compactor selected in accordance with § 205.205-5 which must be a compactor of the configuration which is identified pursuant to paragraph (c) (1) (i) of this section as having the highest sound level (estimated or actual) within the category;

iv) Compliance of the test compactor with a sound level such that the arithmetic addition of the SLDF to that level does not exceed the applicable standards when tested in accordance with § 205.204; and

(v) Submission of a production verification report pursuant to § 205.205-4.

(2) Where the requirements of paragraph (c) (1) of this section are compiled with, all those configurations contained within a category are considered to be represented by the tested compactor and are considered to be production verified.

(3) Where all other requirements of paragraph (c) (1) of this section are compiled with except that the manufacturer tests a configuration which does not have the highest sound level in a category [as identified in paragraph (c) (1) (ii) of this section], all those configurations in the category which have sound levels no greater than the tested compactor are considered to be production verified; however, a manufacturer must production verify according to the requirements of paragraphs (b) (1) and/or (c) (1) of this section any configurations in the subject category which have a higher sound level than the compactor configuration tested.

(d) A manufacturer may elect to production verify using representative testing pursuant to paragraph (c) of this section, all or part of his product line.

(e) The manufacturer may, at his option, proceed with any of the following alternatives with respect to any compactor determined not in compliance with applicable standards.

(1) Delete that configuration from the production verification report. Configurations so deleted may be included in a later report under § 205.205-4. However, in the case of representative testing a new test compactor from another configuration must be selected and production verified according to the requirements of paragraph (c) of this section, in order to production verify the category represented by the non-compliant compactor.

(2) Modify the test compactor and demonstrate by testing that it meets applicable standards. All modifications and test results shall be reported in the production verification report. The manufacturer shall modify all production compactors of the same configuration in the same manner as the test compactor before distribution into commerce.

(f) Upon request by the Director, Noise Enforcement Division, the manufacturer shall notify said Director of

any production verification testing scheduled by the manufacturer pursuant to this section so that EPA Enforcement Officers may be present to observe and monitor such testing or conduct the testing in lieu of the manufacturer.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.205-3 Configuration identification.

(a) A separate product configuration shall be determined by each combination of the following parameters:

(1) Category parameters listed in § 205.205-2.

(2) Truck Chassis Manufacturer.

(3) Truck Engine Type: (i) Gasoline; (ii) Diesel; (iii) Piston; (iv) Rotary; (v) Turbine; (vi) Number of cylinders and configuration; (vii) Displacement; (viii) Horsepower; (ix) Full load RPM.

(4) Transmission: (i) Automatic; (ii) Manual.

(5) Truck Exhaust System: (i) Horizontal; (ii) Vertical.

(6) Compactor Type: (i) Front loader; (ii) Side loader; (iii) Rear loader.

(7) Compactor Capacity.

(8) Compactor Power System: (i) Power take-off: (A) Transmission mounted; (B) Flywheel mounted; (C) Crankshaft mounted; (D) Full load RPM; (E) Ratio; (F) Manufacturer; (G) Manufacturer's model designation.

(ii) Auxiliary engine: (A) Type: (a) Gasoline; (b) Diesel; (c) Other. (B) Number of cylinders and configuration.

(C) Manufacturer.

(D) Horsepower.

(E) Displacement.

(F) Full load RPM.

(G) Cooling system.

(H) Manufacturer's model designation.

(I) Exhaust system.

(iii) Direct drive.

(9) Hydraulic power system: (i) Pump: (A) Manufacturer.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.205-4 Production verification report: required data.

(a) Prior to distribution in commerce of any product to which these regulations apply, the manufacturer shall submit a production verification report to the Director, Noise Enforcement Division (EN-387), U.S. Environmental Protection Agency, Washington, D.C. 20460, unless product verification is waived in accordance with § 205.205-2(a) (1) and (2). A manufacturer may choose to submit separate production verification reports for different parts of his product line.

(b) The report shall be signed by an authorized representative of the manufacturer and shall include the following:

(1) The name, location and description of the manufacturer's noise emission test facilities which meet the specifications of § 205.204 and have been utilized to conduct testing pursuant to this subpart: Except that a test facility that

has been described in a previous submission under this subpart need not again be described but must be identified as such.

(2) A description of normal predelivery maintenance procedure.

(3) A description of all compactor configurations, as determined in accordance with § 205.205-3, to be distributed in commerce by the manufacturer, including the sound level degradation factor for each configuration and a list identifying or defining any device or element of design (including its location and method of operation) incorporated into compactors for the purpose of noise control and any device that affects noise emission from the compactor and does not operate during the normal operating modes of the compactor. The manufacturer may satisfy the compactor configuration description requirements of this paragraph by submitting as part of the production verification report a copy of his technical sales literature that describes his product line including options, provided that this literature is supplemented with any additional information necessary to fulfill the requirements of this section. If a manufacturer elects to production verify pursuant to § 205.205-2(c), the configuration, within each category, which is estimated to have the highest A-weighted sound level at the end of its Acoustical Assurance Period shall be identified. The manufacturer may estimate the average sound level based on his best technical judgment or data. The criteria used to estimate each sound level shall be stated with the estimates.

(4) The following information for each noise emission test conducted:

(i) The completed data sheet required by § 205.204 for all official tests conducted in accordance with § 205.205-7 including, for each invalid test, the reason for invalidation.

(ii) A complete description of any preparation, maintenance or testing which was performed on the test compactor and which will not be performed on all other production compactors.

(iii) The reason for replacement where a replacement compactor was necessary, and test results, if any, for replaced compactors.

(5) A complete description of the sound data acquisition system if other than those specified in § 205.204.

(6) The following statement and endorsement:

This report is submitted pursuant to Section 6 and Section 13 of the Noise Control Act of 1972. All testing for which data is reported herein is conducted in strict conformance with applicable regulations under 40 CFR Part 205, et. seq. All the data reported herein is a true and accurate representation of such testing. All other information reported herein is, to the best of -----

(company name)
knowledge, true and accurate, I am aware of the penalties associated with violations of the Noise Control Act of 1972 and the regulations thereunder.

(Signed) -----

(authorized representative)

PROPOSED RULES

(c) Where a manufacturer elects to submit separate production verification reports for portions of his product line as provided for in paragraph (a) of this section, information provided in previous reports need not be resubmitted: Except, that information necessary to update or make current previously submitted information must be submitted.

(d) Any change with respect to information reported pursuant to this subpart shall be reported as soon as the information becomes available.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.205-5 Test sample selection.

Test compactors of a configuration for which production verification testing is required § 205.205-2 shall be a compactor of the subject configuration which has been assembled using the manufacturer's normal production processes and will be sold or offered for sale in commerce.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.205-6 Test preparation.

(a) Prior to the official test, the test compactor selected in accordance with § 205.205-5 shall not be prepared, tested, modified, adjusted, or maintained in any manner unless such adjustments, preparation, modification or tests are part of the manufacturer's prescribed manufacturing and inspection procedures, and are documented in the manufacturer's internal compactor assembly and inspection procedures, or unless such adjustments or tests are required or permitted under this subpart or are approved in advance by the Administrator. The manufacturer may perform adjustments, preparations, modifications or tests normally performed at the port of entry of the manufacturer to prepare the compactor for delivery to a dealer or customer, provided that such adjustments, preparation, modification, or tests are documented in the production verification report.

(b) Equipment or fixtures necessary to conduct the test may be installed on the compactor: *Provided*, That such equipment or fixtures shall have no effect on the noise emissions of the compactor, as determined by the measurement methodology.

(c) In the event of a compactor malfunction (i.e., failure to start) the manufacturer may perform the maintenance that is necessary to enable the compactor to operate in a normal manner: *Provided*, That such maintenance is documented and reported in the final report prepared and submitted in accordance with this subpart.

(d) No quality control, quality assurance testing, assembly or selection procedures shall be used on the test compactor or any portion thereof, including parts and subassemblies, that will not normally be used during the production and assembly of all other compactors of the category which will be distributed in commerce, unless such procedures are required or permitted under this sub-

part, or are approved in advance by the Administrator.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.205-7 Testing.

(a) The manufacturer shall conduct one valid test in accordance with the test procedures specified in § 205.204 for each compactor selected for verification testing.

(b) No maintenance will be performed on the test compactors except as provided for by § 205.205-6.

(c) In the event a compactor is unable to complete the noise test, the manufacturer may replace the compactor. Any replacement compactor will be a production compactor of the same configuration as the replaced compactor and will be subject to all the provisions of these regulations. Any replacement shall be reported in the production verification report including the reason for the replacement.

(d) In the event a compactor fails to comply with the standards of this subpart when tested in accordance with the procedures specified in paragraph (a) of this section, the manufacturer may proceed in accordance with § 205.205-2(e).

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.205-8 Addition of, changes to and deviation from a compactor configuration during the year.

(a) Any change to a configuration with respect to any of the parameters stated in § 205.205-3 shall constitute the addition of a new and separate configuration or category to the manufacturer's product line.

(b) (1) When a manufacturer introduces a new category or configuration to his product line, he shall proceed in accordance with § 205.205-2.

(2) If the configuration to be added can be grouped within a verified category, and the new configuration is estimated to have a lower A-weighted sound level than a previously verified configuration with the same category, the configuration shall be considered verified: *Provided*, That the manufacturer submits a report pursuant to § 205.205-4 with respect to such configuration.

(Sec. 13 of the Noise Control Act, (42 U.S.C. 4912).)

§ 205.205-9 Production Verification based on data from previous years.

(a) Production verification of each configuration will be required at the beginning of each year except that in certain instances, the Administrator, upon request by the manufacturer, may permit the use of production verification data for specific configurations from previous production verification reports. Considerations relevant to his decision may include, but are not limited to:

(1) The level of the standard in effect for the year in question;

(2) Performance based on production verification data for previous years;

(3) Performance based on data obtained from selective enforcement testing during previous years; and

(4) The number and type of noise emission design changes incorporated in the new models that affect the noise emission level of that model.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.205-10 Cessation of distribution.

(a) If a category or configuration is found to be non-conforming to this subpart by reason of failure to be properly verified, as required by § 205.205-2, the Administrator may issue an order to the manufacturer to cease to distribute in commerce compactors of that category or configuration. However, such an order shall not be issued if the manufacturer has made a good faith attempt to properly production verify the category or configuration. The burden of establishing such good faith shall rest with the manufacturer.

(b) Any such order shall be issued after notice and opportunity for a hearing.

(Sec. 11 of the Noise Control Act (42 U.S.C. 4910).)

§ 205.205-11 Labeling—compliance.

(a) (1) The manufacturer of any compactor subject to the standards prescribed in § 205.202 shall, at the time of manufacture, affix a permanent, legible label, of the type and in the manner described in paragraphs (a) (2), (3) and (4) of this section, containing the information specified in this section, to all such compactors to be distributed in commerce.

(2) A plastic or metal label shall be welded, riveted, or otherwise permanently attached in a readily visible position, on the forward driver's side of the compactor unit body.

(3) The label shall be affixed by the compactor manufacturer, who has verified such compactor pursuant to § 205.205-2, in such a manner that it cannot be removed without destroying or defacing the label, and shall not be affixed to any piece of equipment that is easily detached from such compactor.

(4) The label shall contain the following information lettered in the English language in block letters and numerals, which shall be of a color that contrasts with the background of the label:

(i) The label heading Product Noise Emission Control Information;

(ii) Full corporate name and trademark of manufacturer;

(iii) Identification number;

(iv) Date of manufacture, which may consist of a serial number of code in those instances where records specified in § 205.203(a)(1)(iv) are maintained; and

(v) The statement:

This compactor, when new, is warranted not to exceed the applicable standard effective on (month/year) when tested as prescribed by U.S. EPA. Tampering with any product noise control device or element of

design (see owner's manual) or use of this product after such tampering is prohibited by Federal Law.

(b) Any compactor manufactured solely for use outside the United States and not conforming to the noise emission standards for this regulation shall be clearly labeled "For Export Only."

(Sec. 13 of the Noise Control Act, (42 U.S.C. 4912).)

§ 205.206 Testing by the Administrator.

(a) (1) The Administrator may require that a product to be tested pursuant to these regulations or any untested product be submitted to him at such time and place as he may designate for the purpose of conducting tests in accordance with the test procedures described in § 205.204 to determine whether such products conform to applicable regulations.

(2) The Administrator may specify that he will conduct such testing at the manufacturer's facility, in which case instrumentation and equipment of the type required by these regulations shall be made available by the manufacturer for test operations. The Administrator may conduct such tests with Agency equipment, which shall equal or exceed the performance specifications of the instrumentation and equipment specified by the Administrator in this regulation.

(b) (1) If, based on tests conducted by EPA, or other relevant information, the Administrator determines that the test facility does not meet the requirements of § 205.204 (b) and (c) (including any alternate procedures that may be approved under § 205.204(h)), he will notify the manufacturer in writing of his determination and the reasons therefor.

(2) After any notification issued under paragraph (b) (1) of this section has taken effect, no data thereafter derived from such test facility will be acceptable for purposes of this subpart and the Administrator may issue an order to the manufacturer, with respect to the product category or configuration in question, to cease to distribute in commerce compactors of such category or configuration: Except that any such order shall be issued only after notice and opportunity for a hearing. Such notification may be included in any notification under paragraph (b) (1) of this section. A manufacturer may request that the Administrator grant a hearing; such request shall be made not later than 15 days, or other such period as may be allowed by the Administrator, subsequent to notification of the Administrator's intent to issue an order to cease to distribute.

(3) The manufacturer may request in writing that the Administrator reconsider his determination in paragraph (b) (1) of this section based on data or information which indicates that changes have been made to the test facility and such changes have resolved the reasons for disqualification.

(4) The Administrator will notify the manufacturer of his determination with regard to the requalification of the test

facility within 10 days of the manufacturer's request for reconsideration pursuant to paragraph (b) (3) of this section.

(Secs. 11 and 13 of the Noise Control Act (42 U.S.C. 4910, 4912).)

§ 205.207 Selective enforcement auditing requirements.

§ 205.207-1 Test request.

(a) The Administrator will request all testing under this subpart by means of a test request addressed to the manufacturer.

(b) The test request will be signed by the Assistant Administrator for Enforcement or his designee. The test request will be delivered by an EPA Enforcement Officer to the plant manager or other responsible official as designated by the manufacturer.

(c) The test request will specify the compactor category or configuration selected for testing, the batch selected for testing, the batch size, the manufacturer's plant or storage facility from which the compactors shall be selected, and the time at which a compactor shall be selected. The test request will also provide for situations in which the selected configuration or category is unavailable for testing. The test request may include an alternative category or configuration selected for testing in the event that compactors of the first specified category or configuration are not available for testing because the units are not being manufactured at the specified plant, are not being manufactured during the specified time, or are not being stored at the specified plant or storage facility.

(d) Any manufacturer shall, upon receipt of the test request: (1) If the manufacturer produces less than 4 of the specified category or configuration of compactor per given period of time specified in the test request, test every compactor produced in two consecutive batches in accordance with this regulation and the conditions specified in the test request.

(i) If one or more of the compactors in a test batch fails to meet the standard, the batch is rejected.

(ii) If one batch is rejected then the batch sequence determined under this paragraph is rejected.

(2) If he produces 4 or more of the specified category or configuration of compactors per given period of time as specified in the test request, select and test a batch sample of compactors from two consecutively produced batches of the compactor category or configuration specified in the test request in accordance with these regulations and the conditions specified in the test request.

(e) (1) Any testing conducted by the manufacturer pursuant to a test request shall be initiated within such period as is specified within the test request. Such test initiation may be delayed for increments of 24 hours or one business day where ambient test site weather conditions in any 24-hour period do not permit testing: *Provided*,

That the ambient test site weather conditions for that period are recorded.

(2) The manufacturer shall complete noise emission testing on a minimum of five compactors per day unless otherwise provided for by the Administrator or unless ambient test site conditions permit only the testing of a lesser number: *Provided*, That ambient test site weather conditions for that period are recorded.

(3) The manufacturer shall be allowed 24 hours to ship compactors from a batch sample from the assembly plant to the testing facility if the facility is not located at the plant or in close proximity to the plant: Except, that the Administrator may approve more time based upon a request by the manufacturer accompanied by a satisfactory justification.

(f) The Administrator may issue an order to the manufacturer to cease to distribute in commerce compactors of a specified category or configuration being manufactured at a particular facility if:

(1) The manufacturer refuses to comply with the provisions of a test request issued by the Administrator pursuant to this section; or

(2) The manufacturer refuses to comply with any of the requirements of this section.

(g) A cease-to-distribute order shall not be issued under paragraph (f) of this section if such refusal is caused by conditions and circumstances outside the control of the manufacturer which render it impossible to comply with the provisions of a test request or any other requirements of this section. Such conditions and circumstances shall include, but are not limited to, any uncontrollable factors which result in the temporary unavailability of equipment and personnel needed to conduct the required tests, such as equipment breakdown or failure, or illness of personnel, but shall not include failure of the manufacturer to adequately plan for and provide the equipment and personnel needed to conduct the tests. The manufacturer will bear the burden of establishing the presence of the conditions and circumstances required by this paragraph.

(h) Any such order to cease to distribute shall be issued only after a notice and opportunity for a hearing.

(Secs. 11, 13 of the Noise Control Act (42 U.S.C. 4910, 4912).)

§ 205.207-2 Test sample selection.

(a) Compactors comprising the batch sample which are required to be tested pursuant to a test request in accordance with this subpart will be selected in the manner specified in the test request from a batch of compactors of the category or configuration specified in the test request. If the test request specifies that the compactors comprising the batch sample must be selected randomly, the random selection will be achieved by sequentially numbering all of the compactors in the batch and then using a table of random numbers to select the number of compactors as specified in paragraph (c) of this section based on

PROPOSED RULES

the batch size designated by the Administrator in the test request. An alternative random selection plan may be used by a manufacturer: *Provided*, That such a plan is approved by the Administrator. If the test request does not specify that test compactors must be randomly selected, the manufacturer shall select test compactors consecutively. The provisions of § 205.205-7 (b) and (c) shall also pertain to this section.

(b) The Acceptable Quality Level is 10 percent. The appropriate sampling plans associated with the designated AQL are contained in Appendix I, Table II of this subpart.

(c) The appropriate batch sample size will be determined by reference to Appendix I, Tables I and II. A code letter is obtained from Table I based on the batch size designated by the Administrator in a test request. The batch sample size will be obtained from Table II of Appendix I of this subpart. The batch sample size will be equal to the maximum cumulative sample size for the appropriate code letter obtained from Table I plus an additional 10 percent rounded off to the next highest number.

(d) Compactors comprising the test sample will be randomly selected from the batch sample using the same random selection plan as in paragraph (a) of this section. Test sample size will be determined by using Table II of Appendix I of this subpart.

(e) The test compactors of the category or configuration selected for testing shall have been assembled by the manufacturer for distribution in commerce using the manufacturer's normal production process.

(f) Unless otherwise indicated in the test request, the manufacturer will select the batch sample from the production batch next scheduled after receipt of the test request, of the category or configuration specified in the test request.

(g) Unless otherwise indicated in the test request, the manufacturer shall select the compactors designated in the test request for testing.

(h) At their discretion, EPA enforcement officers, rather than the manufacturer, may select the compactors designated in the test request.

(i) The manufacturer will keep on hand all products in the batch sample until such time as the batch is accepted or rejected in accordance with § 205.207-6: Except, that compactors actually tested and found to be in conformance with this regulation need not be kept.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.207-3 Test sample preparation.

Prior to the official test, the test compactor selected in accordance with § 205.207-2 will be prepared in accordance with § 205.205-6.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.207-4 Testing procedures.

(a) The manufacturer shall conduct one valid test in accordance with the test procedures specified in § 205.204 of this

subpart for each compactor selected for testing pursuant to this subpart.

(b) No maintenance will be performed on test compactors except as provided for by § 205.207-3. In the event a compactor is unable to complete the emission test, the manufacturer may replace the compactor. Any replacement product will be a production compactor of the same configuration as the replaced compactor. It will be randomly selected from the batch sample and will be subject to all the provisions of these regulations.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.207-5 Reporting of the test results.

(a) (1) The manufacturer shall submit a copy of the test report for all testing conducted pursuant to § 205.207 at the conclusion of each 24-hour period during which testing is done.

(2) For each test conducted the manufacturer will provide the following information:

- (i) Configuration and category identification where applicable;
- (ii) Sound level degradation factor;
- (iii) Year, make, assembly date, and model of compactor;
- (iv) Compactor serial number;
- (v) Test results by serial numbers; and

(vi) Serial number of the vehicle on which manufacturer has installed the compactor in subdivision (iv) of this subparagraph.

(3) The first test report for each batch sample will contain a listing of all serial numbers in that batch.

(b) In the case where an EPA enforcement officer is present during testing required by this subpart, the written reports requested in paragraph (a) of this section may be given directly to the enforcement officer.

(c) Within 5 days after completion of testing of all compactors in a batch sample, the manufacturer shall submit to the Administrator a final report which will include the information required by the test request in the format stipulated in the test request in addition to the following:

(1) The name, location, and description of the manufacturer's noise emission test facilities which meet the specifications of § 205.204 and were utilized to conduct testing reported pursuant to this section: Except, that a test facility that has been described in a previous submission under this subpart need not again be described, but must be identified as such.

(2) A description of the random compactor selection method used, referencing any tables of random number selection used, name of the person in charge of the random number selection, if the compactor test request specifies a random compactor selection.

(3) The following information for each noise emission test conducted:

(i) The completed data sheet required by § 205.204 for all noise emission tests including for each invalid test, the reason for invalidation.

(ii) A complete description of any modification, repair, preparation, maintenance, and/or testing which was performed on the test compactor and will not be performed on all other production compactors.

(iii) The test results for any replaced compactor and the reason for replacement of the compactor.

(4) A complete description of the sound data acquisition system if other than those specified in § 205.204.

(5) The following statement and endorsement:

This report is submitted pursuant to Section 6 and Section 13 of the Noise Control Act of 1972. All testing for which data is reported herein was conducted in strict conformance with applicable regulations under 40 CFR Part 205 *et seq.* All the data reported herein is a true and accurate representation of such testing. All other information reported here is, to the best of -----

(company name)

knowledge, true and accurate. I am aware of the penalties associated with violations of the Noise Control Act of 1972 and the regulations thereunder.

(authorized representative)

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.207-6 Acceptance and rejection of batches.

(a) A failing product is one whose measured sound level is in excess of the sound level equal to the applicable noise emission standard set forth in § 205.202 minus the sound level degradation factor as determined in § 205.208-4 for the category or configuration being tested.

(b) The batch from which a batch sample is selected will be accepted or rejected based upon the number of failing compactors in the batch sample. A sufficient number of test samples will be drawn from the batch sample until the cumulative number of failing compactors is less than or equal to the acceptance number, or greater than or equal to the rejection number appropriate for the cumulative number of compactors tested. The acceptance and rejection numbers listed in Appendix I of this subpart, Table II at the appropriate code letter obtained according to § 205.207-2 will be used in determining whether the acceptance or rejection of a batch has occurred.

(c) Acceptance or rejection of a batch takes place when a decision that a compactor is a failing unit is made on the last compactor required to make a decision under paragraph (b) of this section.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.207-7 Acceptance and rejection of batch sequence.

(a) The manufacturer will continue to inspect consecutive batches until the batch sequence is accepted or rejected. The batch sequence will be accepted or rejected based upon the number of rejected batches. A sufficient number of consecutive batches will be inspected until the cumulative number of rejected batches is less than or equal to the se-

quence acceptance number, or greater than or equal to the sequence rejection number appropriate for the cumulative number of batches inspected. The acceptance and rejection numbers listed in Table III of Appendix I of this subpart at the appropriate code letter obtained according to § 205.207-2 will be used in determining whether the acceptance or rejection of a batch sequence has occurred.

(b) Acceptance or rejection of a batch sequence takes place when the decision is made on the last compactor required to make a decision under paragraph (a) of this section.

(c) If the batch sequence is accepted, the manufacturer will not be required to perform any additional testing on products from subsequent batches pursuant to the initiating test request.

(d) The Administrator may terminate testing earlier than required in paragraph (b) of this section based on a request by the manufacturer, accompanied by voluntary cessation of distribution in commerce, from all plants, of compactors from the category or configuration in question: *Provided*, That once production is reinitiated the manufacturer must take the action described in § 205.207-9 (a) (1) and (a) (2) prior to distribution in commerce of any compactor from any plant of the compactor category or configuration in question.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.207-3 Continued testing.

(a) If a batch sequence is rejected in accordance with paragraph (b) of § 205.207-7, the Administrator may require 100 percent testing of all compactors of that category or configuration produced at that plant.

(b) The Administrator will notify the manufacturer in writing of his intent to require 100 percent testing of compactors pursuant to paragraph (a) of this section.

(c) Any tested compactor which demonstrates conformance with the applicable standard may be distributed into commerce.

(d) Any knowing distribution into commerce of a compactor which does not comply with the applicable standard is a prohibited act.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.207-9 Prohibition of distribution in commerce; manufacturer's remedy.

(a) The Administrator will permit the cessation of continuous testing under § 205.207-8 once the manufacturer has taken the following actions:

(1) Submits a written report to the Administrator which identifies the reason for the non-compliance of the compactors, describes the problem and describes the proposed quality control or quality assurance remedies to be taken by the manufacturer to correct the problem or follows the requirements for an engineering change pursuant to § 205.205-9; and

(2) Demonstrates that the specified compactor category or configuration has passed a retest conducted in accordance with § 205.207, and the conditions specified in the initial test request.

(b) Any compactor falling the prescribed noise emission tests conducted pursuant to this Subpart F may not be distributed into commerce until necessary adjustments or repairs have been made and the compactor passes a retest.

(c) No compactors of a rejected batch which are still in the hands of the manufacturer may be distributed in commerce unless the manufacturer has demonstrated to the satisfaction of the Administrator that such compactors do in fact conform to the regulation: Except, that any compactor that has been tested and does, in fact, conform with this regulation may be distributed into commerce.

(Secs. 11, 13 of the Noise Control Act (42 U.S.C. 4910, 4912).)

§ 205.208 In-use requirements.

§ 205.208-1 Warranty.

(a) The manufacturer of a compactor who is required to production verify under this part shall include in the owner's manual or in other information supplied to the ultimate purchaser the following statement:

NOISE EMISSIONS WARRANTY

The manufacturer warrants to the first person who purchases this compactor for purposes other than resale and each subsequent purchaser that this compactor was designed, built and equipped to conform, at the time of sale to such first purchaser, with all applicable U.S. EPA noise control regulations.

This warranty is not limited to any particular part, component or system of the compactor. Defects in the design, assembly, or in any part, component, or system of the compactor, which at the time of sale to such first purchaser, cause noise emission levels to exceed Federal standards, are covered by this warranty for the actual life of the compactor.

(b) Not later than the date of submission of the product verification report required by § 205.205-4, the manufacturer shall submit to the Administrator two (2) copies of the written noise emission warranty required by paragraph (a) of this section and two (2) copies of all other information provided to the ultimate purchaser which could reasonably be construed as impacting on the warranty.

(c) Not later than ten (10) days after dissemination, the manufacturer shall submit two (2) representative copies of all information of a general nature, or modifications thereto, which is provided to dealers, zone representatives, or other agents of the manufacturer regarding the administration and application of the noise emission warranty. Information regarding noise emission warranty claims which is provided to a dealer or representative in response to a particular warranty claim or dealer inquiry is not considered to be information of a general nature, if such information does not receive broad dissemination to dealers.

(d) All information required to be forwarded to the Administrator pursuant to this section shall be addressed to: Director, Noise Enforcement Division, (EN-387), U.S. Environmental Protection Agency, Washington, D.C. 20460.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.208-2 Tampering.

(a) For each model year and for each configuration of compactors covered by this part, the manufacturer shall submit to the Administrator a list of those acts which, in the manufacturer's estimation, might be done to the compactor in use on more than an occasional basis, and result in an increase in noise emission levels above the standards prescribed in § 205.22. The manufacturer shall state his estimate, wherever possible, of the amount of this increase in noise level.

(b) The above information shall be submitted to the Administrator within adequate time prior to the introduction into commerce of each configuration to allow for the development and printing of tampering lists, as provided in paragraphs (c) and (d) of this section.

(c) On the basis of the above information, the Administrator will develop a list of acts which, in his judgment, constitute the removal or rendering inoperative, totally or partially, other than for purposes of maintenance, repair, or replacement, of noise control devices or elements of design of the compactor. This list shall be provided to the manufacturer by the Administrator within 30 days of the date on which the information required in paragraph (a) of this section is submitted by the manufacturer. The list shall be included in the statement to the ultimate purchaser as required by paragraph (d) (2) of this section. If the list is not provided by the Administrator within 30 days of the date on which the information required in paragraph (a) of this section is submitted, the manufacturer shall include only the statement in paragraph (d) (1) of this section until such time as the list has been provided and the owner's manual is reprinted for other purposes.

(d) The manufacturer shall include in the owner's manual the following information:

(1) The statement:

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED

Federal law prohibits the following acts or the causing thereof: (1) The removal or rendering inoperative by any person other than for purposes of maintenance repair, or replacement, of any device or element of design incorporated into any new compactor for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use, or (2) the use of the compactor after such device or element of design has been removed or rendered inoperative by any person.

(2) The statement:

Among those acts presumed to constitute tampering are acts listed below.

Immediately following this statement, the manufacturer shall include the list

PROPOSED RULES

developed by the Administrator under paragraph (c) of this section.

(e) Any act included in the list prepared pursuant to paragraph (c) of this section is presumed to constitute tampering; however, in any case in which a prohibited act has been committed and it can be shown that such act resulted in no increase in the sound level of the unit or that the unit still meets the noise emission standard of § 205.202, such act will not constitute tampering.

(f) The provisions of this section are not intended to preclude any State or local jurisdiction from adopting and enforcing its own prohibitions against the removal or rendering inoperative of noise control systems on compactors subject to this part.

(g) All information required by this section to be furnished to the Administrator shall be sent to the following address:

Director, Noise Enforcement Division (EN-387), U.S. Environmental Protection Agency, Washington, D.C. 20460.
(Secs. 10, 13 of the Noise Control Act (42 U.S.C. 4909, 4912).)

§ 205.208-3 Instructions for maintenance, use and repair.

(a) (1) The manufacturer shall provide to the ultimate purchaser of each compactor covered by this subpart written instructions for the proper maintenance, use and repair of the compactor in order to provide reasonable assurance of the elimination or minimization of noise emission degradation throughout the life of the compactor.

(2) The purpose of the instructions is to inform purchasers and mechanics of those acts necessary to reasonably assure that degradation of noise emission level is eliminated or minimized during the life of the compactor. Manufacturers shall prepare the instructions with this purpose in mind. The instructions shall be clear and, to the extent practicable, written in nontechnical language.

(3) The instructions shall not be used to secure an unfair competitive advantage. They shall not restrict replacement equipment to original manufacturer equipment or service to dealer service, unless such manufacturer makes public the performance specifications on such equipment.

(b) For the purpose of encouraging proper maintenance, the manufacturer shall provide a record or log book which shall contain a schedule for the performance of all required noise emission control maintenance. Space shall be provided in this record book so that the purchaser can note what maintenance was done, by whom, where and when.

(c) Not later than the date of submission of the production verification report required by § 205.205-4, the manufacturer shall submit to the Administrator two (2) copies of the maintenance

instructions (including the record book) required by paragraphs (a) and (b) of this section.

(d) The Administrator will require modifications to the instructions if they are not sufficient to fulfill the requirements of paragraph (a) of this section.

(e) Information required to be submitted to the Administrator pursuant to this section shall be sent to the following address:

Director, Noise Enforcement Division (EN-387), U.S. Environmental Protection Agency, Washington, D.C. 20460.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.208-4 Sound Level Degradation Factor (SLDF) and retention of durability data.

(a) Each manufacturer responsible for compliance with the standards specified in § 205.202 shall develop a Sound Level Degradation Factor (SLDF) for each of its compactor configurations utilizing the records compiled under section (b) of this section.

(b) (1) The manufacturer shall establish and maintain records which demonstrate the increase in noise level which will occur for each product configuration during the specified Acoustical Assurance Period.

(2) The records may include, but need not be limited to, the following:

(i) Durability data and actual noise testing on critical noise producing or attenuating components.

(ii) Sound level deterioration curves on the entire product.

(iii) Data from products in actual use.

(c) The SLDF is to be used in all Production Verification testing and Selective Enforcement Audit testing to determine compliance.

(d) If the manufacturer determines the product's sound level will not increase during the Acoustical Assurance Period when properly used and maintained, the SLDF is zero.

(e) If the manufacturer determines that a product's sound level does not increase, but rather decreases with use, yielding a negative SLDF, he shall use zero as the SLDF in all testing under

these regulations, but shall determine and record the actual SLDF.

(Sec. 13 of the Noise Control Act (42 U.S.C. 4912).)

§ 205.209 Recall of non-complying compactors.

(a) Pursuant to section 11(d)(1) of the Act, the Administrator may issue an order to the manufacturer to recall and repair or modify any compactor distributed into commerce which is not in compliance with this subpart.

(b) A recall order issued pursuant to this section shall be based upon a determination by the Administrator that compactors of a specified category or configuration have been distributed in commerce which do not conform to the regulation. Such determination may be based on:

(1) A technical analysis of the noise emission characteristics of the category or configuration in question; or

(2) Any other relevant information, including test data.

(c) For the purposes of this section, noise emissions may be measured by the test prescribed in § 205.204 for testing prior to distribution in commerce or any other test which has been demonstrated to correlate with the prescribed test procedure in accordance with § 205.204(g).

(d) Any order to recall shall be issued only after notification and an opportunity for a hearing.

(e) All costs, including labor and parts, associated with the recall and repair or modification of non-complying compactors under this section shall be borne by the manufacturer.

(f) This section shall not limit the discretion of the Administrator to take any other actions which are authorized by the Act.

(Sec. 11 of the Noise Control Act (42 U.S.C. 4910).)

APPENDIX I

TABLE I—SAMPLE SIZE CODE LETTERS

Batch size:	Code letter
4 to 8.....	A
9 to 15.....	B
16 to 25.....	C
26 and larger.....	D

TABLE II.—Sampling plans for inspecting batches

Sample size code letter	Test sample	Test sample size	Cumulative test sample size	Batch inspection criteria	
				Acceptance number	Rejection number
A.....	1st.....	4	4	0	1
B.....	1st.....	3	3	0	1
C.....	1st.....	2	2	0	2
	2d.....	3	3	1	2
D.....	1st.....	2	2	(*)	2
	2d.....	2	4	(*)	2
	3d.....	2	6	0	2
	4th.....	2	8	0	2
	5th.....	2	10	1	3
	6th.....	2	12	1	3
	7th.....	2	14	2	3

* Batch acceptance not permitted at this sample size.

PROPOSED RULES

43243

TABLE III.—Batch sequence plans

Sample size code letter	Number batches	Cumulative number batches	Sequence inspection criteria	
			Acceptance number	Rejection number
A.....	2	3	1	(1)
	2	4	2	4
	2	6	3	5
	2	8	4	5
B.....	2	2	0	(1)
	2	4	1	4
	2	6	2	5
	2	8	3	5
	2	10	4	6
	2	12	6	6
C.....	2	2	(2)	2
	2	4	0	2
	2	6	0	3
	2	8	1	3
	2	10	2	4
	2	12	3	4
	2	2	0	2
	2	4	1	3
D.....	2	6	2	4
	2	8	3	4

¹ Batch sequence rejection not permitted for this number of batches.
² Batch sequence acceptance not permitted for this number of batches.

TABLE IV.—Noise emission test data sheet: Truck-mounted solid waste compactor

Test Report No. _____

I. Compactor characteristics:

Manufacturer _____ Model _____ Serial No _____
 Rated speed _____ Rated r/min _____ Capacity _____ Yd³ (m)³ _____
 Configuration identification _____ Category identification _____
 Compactor identification No _____ Build date _____ Truck identification No _____

II. Test conditions:

Manufacturer test site identification and location _____
 Ambient sound levels (a) Beginning of test _____ dBA (b) End of test _____ dBA
 Ambient wind speed _____ mi/h (km/hr); Atmospheric pressure _____ lb/in² (kPa)
 Temperature _____ °F (°C)

III. Instrumentation:

Microphone manufacturer _____ Model No _____ Serial No _____
 Sound level meter manufacturer _____ Model No _____ Serial No _____
 Acoustical calibrator manufacturer _____ Model No _____ Serial No _____
 Other _____ Model No _____ Serial No _____

IV. Sound level data (dB reference 2×10⁻⁵ Pascals):

A-weighted sound levels in dBA						
Compactor reference surface				Calculated average test level	Sound level degradation factor	Final calculated average level
Front	L.H. side	Rear	R.H. side			
_____	_____	_____	_____	_____	_____	_____

Compactor operating cycle _____
 Maximum steady level _____
 Maximum impulse level _____

V. Test personnel and witnesses:

Tested by: _____ Date _____
 Reported by: _____ Date _____
 Checked by: _____ Date _____

[FR Doc.77-24864 Filed 8-25-77; 8:45 am]