



CHEMICAL MANUFACTURERS ASSOCIATION

Vinyl Chloride Health Committee

FAX

October 14, 1997

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MESSAGE

Enclosed are the "final" comments on the Clean Air Act Section 112 (K). Due to time constraints, if you have any concerns, please respond as soon as possible.. If you have any questions, please call me. Thank you.

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PAGE(S) 20 (including cover)



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FINAL DRAFT

COMMENTS ON THE EXTERNAL REVIEW DRAFT
OF EPA'S 1990 EMISSIONS INVENTORY
OF FORTY SECTION 112(k) POLLUTANTS

I. INTRODUCTION

The Vinyl Chloride Panel of the Chemical Manufacturers Association appreciates the opportunity to provide comments on the external review draft of the 1990 Emissions Inventory of Forty Section 112(k) Pollutants, which is intended to provide supporting data for a future Environmental Protection Agency (EPA) regulatory strategy for improving air quality and public health in urban areas pursuant to Section 112(k) of the Clean Air Act. EPA has stated that the list is a starting point for further analysis under EPA's Urban Air Toxics Study. The Panel believes that vinyl chloride does not meet the criteria for regulation under Section 112(k), and should be removed from the Inventory.

The Panel appreciates the efforts that EPA has undertaken to compile the information contained in the draft Inventory. The inclusion of vinyl chloride as one of the pollutants in the Inventory, however, will not further the goals identified in Section 112(k). EPA articulates a three-step procedure that Section 112(k) imposes relating to the Inventory: (i) identification of area sources of at least 30 hazardous air pollutants (HAPs) that present the greatest threat to urban populations; (ii) assurance that sources that account for 90 percent or more of the aggregate emissions are subject to regulation; and (iii) development of a national strategy to reduce cancer attributable to these pollutants by at least 75 percent. The inclusion of vinyl chloride in the inventory, and in any strategy that might be based on it, will not serve any of these purposes. The focus of Section 112(k) is on area sources, *i.e.*, those that emit fewer than 10 tons per year of any individual HAP and fewer than 25 tons per year of any combination of HAPs.¹ EPA's own data show that vinyl chloride is not present in urban areas as a result of emissions from area sources in any significant amounts. Its inclusion in the Inventory would not be consistent with the statutory mandate. By listing vinyl chloride in the Inventory, along with a number of other chemicals that are not emitted from area sources in

¹ 42 U.S.C. § 7412(b)(1)-(2).

any significant quantity, EPA seems to have conflated the provisions of Section 112(k) dealing specifically with area sources and those dealing with stationary sources as a whole. Vinyl chloride should not be included in the Inventory and it certainly should not be the subject of any national strategy focused on reducing emissions of HAPs from area sources in urban areas.

II. EPA SHOULD PROVIDE MORE INFORMATION ON THE SELECTION OF THE 40 HAPS LISTED

EPA selected the 40 HAPs included in the inventory from among the 188 HAPs listed in Section 112(b) of the Act. The public should be informed as to EPA's rationale for selection of these particular 40 substances *before* it is asked to review emissions estimates developed by EPA. No explanation is provided, however, as to how EPA chose the 40 HAPs identified. The introduction (p. 1-1) contains a vague reference to the use of "[a]vailable toxicity, ambient monitoring, and emissions inventory data, and results from existing exposure and risk assessment studies" to develop the list, but identification of these obvious criteria is meaningless without an explanation as to how they were applied by EPA. For the comment process to be productive, EPA should provide a much more detailed explanation of how it selected each HAP that it proposes to include in the Inventory, including how the available toxicity and emissions data support the conclusion that "as the result of emissions from area sources," it presents "the greatest threat to public health in the largest number of urban areas."²

III. EPA'S EMISSIONS ESTIMATES ARE FLAWED

In addition to the legal and policy objections discussed below, from a purely empirical standpoint EPA's emissions data appear to be seriously flawed. EPA did not use the most widely accepted source for such emissions, its own Toxics Release Inventory (TRI), as the basis for its emissions from chemical manufacturing and perhaps other source categories. Instead, it performed a calculation based on production capacity and an "emissions factor."

² 42 U.S.C. § 7412(k)(3)(B)(i).

The resulting estimates show emissions of vinyl chloride in 1990 that greatly exceed the actual data shown in the 1990 TRI report, often by two or three orders of magnitude. Thus, for example, EPA calculates that Dow Chemical's Plaquemine, Louisiana plant emitted 3,012.06 tons of vinyl chloride in 1990, while the TRI report indicates that only 3.75 tons were emitted. Similarly, EPA calculates that Occidental Chemical's Deer Park, Texas facility emitted 2548.67 tons of vinyl chloride in 1990, when the TRI report indicates that only 0.0435 tons were emitted. Examination of the figures reveals a similar discrepancy for each manufacturing facility. The 1990 TRI data for vinyl chloride are attached.

EPA has given no clear explanation as to why the TRI data were not considered sufficient for purposes of estimating emissions from the chemical manufacturing process. It also has not provided a sufficient discussion of why the "emissions factor" calculation is considered more appropriate. In the introductory section to the Inventory (pp. 4-3, 4-4), EPA states that there are limitations to the use of the TRI data, primarily that not all sources are required to report to the TRI data base. Whatever the merits of this reasoning generally, it would not appear to apply to the chemical manufacturers that make up the overwhelming majority of vinyl chloride emitters. For example, EPA states that the TRI data may not be entirely reliable because some facilities might be able to avoid TRI data reporting requirements based on the chemical threshold criteria, *i.e.*, manufacture or processing of more than 12.5 tons per year of a listed chemical or use of more than 5 tons per year of a listed chemical. This concern does not apply in the case of chemical manufacturers responsible for emissions of vinyl chloride, and presumably to chemical manufacturers in general. In light of the large discrepancies between the numbers that EPA calculated and those actually reported on the TRI, the Agency has a significant burden to justify its theoretical attempt to derive values for emissions.

Even more significant for purposes of developing an Inventory of urban air toxics from area sources is the approach EPA apparently used to develop its emissions estimates for other source categories. EPA apparently assigned each company reporting emissions of vinyl chloride on the 1990 TRI to a source category based on assumptions as to the likelihood that it would be engaged in a particular line of business. Then, for each source category, EPA came

up with percentages of emissions from that category that would be deemed to be from area sources and percentages that would be deemed to be from major sources. These major/area percentages were then applied to the total national emissions of each pollutant from each source category to calculate the major and area source emissions for that category. EPA does not detail how it chose to allocate emissions into source categories, nor does it explain how it derived the percentages for area and major sources, either in the aggregate or on the basis of individual categories, except to say that the emissions were spatially allocated. It is hard to tell whether anything more than guesswork was involved. It appears that EPA took one set of assumptions (the assignment of the emissions to source categories) and combined it with another set of assumptions (the percentage of major and area sources for each category) to come up with the estimates in the Inventory.

It is difficult for the Panel to say more about the methodology used absent reverse engineering. One important point must be emphasized, however: EPA's estimates in Table 6-41 do not comport with the Panel's empirical knowledge as to sources of vinyl chloride emissions. Table 6-41 shows a number of source categories for vinyl chloride that purportedly result in area source emissions, including such categories as petroleum refining and agricultural chemicals. To the best of our knowledge, vinyl chloride is not used in these industries. As the Agency for Toxic Substances and Disease Registry (ATSDR) recognized in its Toxicological Profile for vinyl chloride, "[v]inyl chloride is used almost exclusively in the United States by the plastics industry for the production of PVC and several copolymers."³ The overwhelming majority of vinyl chloride emissions is from major sources which manufacture vinyl chloride and polyvinyl chloride (PVC) and which fall within a single source category -- chemical manufacturing.

The remaining source categories where vinyl chloride emissions are possible are in those industries which extrude PVC to make articles such as PVC pipe, upholstery for automobiles, and vinyl wall coverings. Such categories may emit small amounts of vinyl chloride during the extrusion process. The limited use of vinyl chloride outside of chemical manufacturing reflects the fact that it is a Group A carcinogen and is stringently regulated by

³ U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry, Toxicological Profile for Vinyl Chloride, Update, 87 (1993).

EPA and other regulatory agencies. For example, the Occupational Safety and Health Administration enforces a 1 part-per-million exposure limit for vinyl chloride. 29 CFR § 1910.1017(c), as well as ancillary provisions. These regulations discourage its use except in well-controlled operations.

The largest source category of emissions of vinyl chloride identified by EPA, other than chemical manufacturing, is "Landfills: chemical waste emissions." Miscellaneous treatment, storage and disposal facilities are already listed under Section 112(c). EPA has implemented regulatory standards that control their emissions of HAPs, including standards of performance for new municipal solid waste landfills and emissions guidelines for existing municipal solid waste landfills. 40 C.F.R. §§ 60.30c, 60.750. These standards regulate the design and operation of such facilities. Such facilities are regulated extensively by EPA under the Resource Conservation and Recovery Act. Given the fact that capture and control requirements are not, as a practical matter, applicable to landfills, it is not clear how any additional standards issued under Section 112(k) could impose requirements that would result in additional reductions in emissions given the comprehensive regulatory schemes already in place.

IV. EPA'S OWN DATA DEMONSTRATE THAT VINYL CHLORIDE EMISSIONS FROM AREA SOURCES IN URBAN AREAS ARE INSIGNIFICANT

According to the Inventory, a total of 25,799 tons of vinyl chloride were emitted in the base year of 1990. Of these, approximately one-third, a total of 8,477 tons, were emitted in rural areas. The remaining 17,321 tons of vinyl chloride that were emitted in urban areas do not loom large in the overall consideration of public health, especially when compared with the emissions levels of certain other HAPs. For example, urban emissions of benzene totaled 1,941,206 tons a year -- more than 100 times that of vinyl chloride. Numerous other HAPs are listed in the Inventory as having been emitted in amounts exceeding 1.5 million tons, and several more appear in excess of 100,000 tons. These aggregate emissions dwarf those of vinyl chloride.

Moreover, bearing in mind the focus of Section 112(k) on the identification of emissions from area sources in urban areas, it is significant that the EPA estimates of vinyl chloride from such sources comprise only 503 tons, or less than 3 percent of the total 17,321 tons emitted. When compared with the area source emissions of some of the other HAPs -- 76,508 tons for benzene, 227,377 tons for extractable organic matter (EOM), 85,925 tons for tetrachloroethylene -- this number is negligible. An HAP which accounts for only a fraction of a percent of the area source emissions in urban areas hardly seems an appropriate candidate for inclusion on a list of substances that purportedly pose the greatest risk to the public health "as the result of emissions from area sources."

V. **THE LANGUAGE AND STRUCTURE OF SECTION 112(k)
DO NOT SUPPORT THE INCLUSION OF VINYL CHLORIDE
IN THE INITIAL INVENTORY OR IN ANY STRATEGIES
THAT ARE BASED ON IT**

In preparing the Inventory, EPA appears to have lost sight of the Section 112(k) mandate to identify the HAPs emitted from *area* sources in urban areas. Instead, it seems to have prepared the Inventory to include any HAPs emitted in urban areas, regardless of their source. Both the language and structure of Section 112(k), however, make clear that it authorizes a regulatory program only for HAPs emitted from area sources.

The specific focus of Section 112(k) is readily apparent from its title -- "Area Source Program." Section 112(k)(1), "Findings and Purpose," makes this even more clear. It begins with the statement that "[t]he Congress finds that emissions of hazardous air pollutants *from area sources* may individually, or in the aggregate, present significant risks to public health in urban areas."⁴ It then goes on to state:

It is the purpose of this subsection to achieve a substantial reduction in emissions of hazardous air pollutants *from area sources* and an equivalent reduction in the public health risks *associated with such sources* including a reduction of not less than 75 per centum in the incidence of cancer attributable to emissions from such sources.⁵

⁴ 42 U.S.C. § 7412(k)(1) (emphasis added).

⁵ *Id.* (emphasis added).

The unmistakable focus is on area sources. Vinyl chloride, which is emitted overwhelmingly from major sources, is not the kind of air pollutant at which this subsection is aimed. Section 112(k)(2) requires EPA to conduct research, in consultation with state and local air pollution control officials, on sources of HAPs in urban areas. This research is to form the basis for the Agency's strategy to reduce emissions. The statute specifically states that the program must include an analysis to characterize the sources of the HAPs, "with a focus on area sources and the contributions that such sources make to public health risks from hazardous air pollutants."⁶ The express goal of the research program, of which the Inventory is a partial result, is to identify HAPs that are emitted specifically from *area sources*, and not those from any source.

Once EPA has completed its research program, it is directed by the statute to develop a national strategy to reduce the harmful effects of HAP emissions on public health. EPA has described the Inventory as the first step in the development of this strategy. The national strategy identified in Section 112(k) consists of three parts -- identification of area sources of at least 30 hazardous air pollutants, assurance that sources accounting for 90 percent or more of aggregate emissions are subject to regulation, and development of a national strategy for 75 percent reduction in cancer incidence -- which are the three goals cited by EPA as the basis for formulating the inventory. An examination of the subparagraphs of Section 112(k) that give rise to the specific duties cited by EPA reveals that vinyl chloride is not an appropriate subject for the strategy.

A. Vinyl Chloride Does Not Fit the Criteria For
HAPs To Be Included in the Inventory

Section 112(k)(3)(B)(i) provides the first prong for the development of a national strategy. EPA is to "identify not less than 30 hazardous air pollutants which, as the result of emissions from area sources, present the greatest threat to public health in the largest number of urban areas and that are or will be listed pursuant to subsection (b)."⁷ Even a brief consideration of this language indicates that vinyl chloride does not fit the criteria for HAPs on

⁶ 42 U.S.C. § 7412(k)(2)(B).

⁷ Section 112(b) is, of course, the list of HAPs established by Congress, to be modified by EPA as appropriate.

the Inventory. The HAPs identified are to be the ones that present the greatest threat to public health as the result of emissions from area sources. Moreover, that threat is not to be one that is confined to an individual locality but must occur in "the largest number of urban areas." As noted above, the total emissions of vinyl chloride from area sources are small, and in comparison with other emissions they are minuscule. It is an unlikely candidate for posing the greatest threat to the public health in the largest number of urban areas.

**B. One Major Source of Vinyl Chloride Accounts for
Over 90 Percent of Aggregate Emissions**

After EPA compiles the list of 30 or more HAPs emitted from area sources, it is directed by Section 112(k)(3)(B)(ii) to identify the source categories or subcategories emitting such HAPs "that are or will be listed pursuant to subsection (c)," and to "assure that sources accounting for 90 per centum or more of the aggregate emissions of each of the 30 identified hazardous air pollutants are subject to standards pursuant to subsection (d)." Section 112(d) provides for the establishment and imposition of maximum achievable control technology ("MACT") requirements on major and area sources.

As noted above, the area sources for vinyl chloride account for only a tiny percentage of its total emissions. Using EPA's own data (pp. 6-123, 6-124), the chemical manufacturing source category alone accounts for 94 percent of aggregate vinyl chloride emissions. Even if the estimate should change, it is clear that most of the aggregate emissions of vinyl chloride are already regulated by the MACT standard for synthetic organic chemical manufacturing. Listing of vinyl chloride in the Inventory is thus unnecessary for EPA to assure itself as to this point.

**C. Reduction of Area Source Emissions of Vinyl Chloride Will Not
Advance the Goal of Reducing Cancer Incidence by 75 Percent**

The third prong of the 112(k) strategy directs EPA to prepare a course of regulatory action based upon the above findings. Section 112(k)(3)(C) provides that:

"[t]he strategy shall include a schedule of specific actions to substantially reduce the public health risks posed by the release of hazardous air pollutants from

area sources The strategy shall achieve a reduction in the incidence of cancer attributable to exposure to hazardous air pollutants emitted by stationary sources of not less than 75 per centum, considering control of emissions of hazardous air pollutants from all stationary sources and resulting from measures implemented by the Administrator or the States under this or other laws.

The regulatory strategy prescribed by Section 112(k) must result in a 75 percent decrease in cancer attributable to exposure to HAPs. It must focus on reducing exposure to the HAPs identified by EPA, but it must do so by identifying regulatory actions aimed at *area sources*, as those are the only sources that EPA is authorized to regulate by Section 112(k)(3). As noted above, emissions of vinyl chloride from area sources comprise only a tiny fraction of a percent of the total HAP emissions from area sources. Even if it were possible to eliminate emissions from these sources, there would be little effect on overall exposure to vinyl chloride because of the overwhelming predominance of major sources. This would not advance the objective of Section 112(k) -- a decrease in cancer attributable to all stationary sources of HAPs.

D. The Structure and History of Section 112

The narrow purpose of Section 112(k) is apparent from the overall structure and legislative history of Section 112. Section 112(f)(1)(A) provides that EPA shall develop and report to Congress on methods of calculating the risk to public health remaining from sources subject to MACT regulation, the so-called "residual risk" determination. Section 112(f)(5) provides that EPA will not be required to conduct any residual risk determination or promulgate emissions limitations "for any category or subcategory of area sources that is listed pursuant to subsection (c)(3) and for which an emission standard is promulgated pursuant to subsection (d)(5)." This exception recognizes the fact that area sources are different from major sources and should be regulated under a unique standard of their own, *i.e.*, that established by section 112(d)(5) and 112(k). The sponsors of the amendment that became Section 112(f)(5) stated that area sources have very different emission patterns from major sources, and that they are often small businesses, which do not have the resources to conduct alternative demographic risk analyses or achieve the emissions levels that might be required

standards issued under the residual risk provisions of Section 112(f). "[T]o impose on each individual area source the same degree of regulation that you would impose on a major toxic air source is unmerited."⁸

Section 112(f)(5) was added to ensure that a distinct regulatory program would apply to area sources. In commenting on the amendment, Senator Moynihan indicated that the residual risk provisions were not only inappropriate for area sources, they were unnecessary, as Section 112(k) provided for a different approach.

Historically, EPA has found it difficult to deal with these area sources. The traditional approach of promulgating emission standards or alternative designs and work practice standards were often inappropriate and cumbersome for regulating many of the area sources. In preparing the clean air bill, the Environment and Public Works Committee tried to provide EPA with the tools needed to deal effectively with area source emissions of air toxics. *Specifically, section 112(k) was added.*⁹

The legislative history of Section 112(k) confirms that Congress intended it to grant EPA the authority to regulate emissions not effectively covered by the regulations issued under other subsections of Section 112, such as standards to reduce residual risk under Section 112(f). The Committee Report on the amendments that included what is now Section 112(k) stated that EPA had found through a series of studies conducted throughout the 1980s that "only a part of the air toxics problem results from the large chemical and industrial facilities which one normally associates with hazardous air pollutants. A substantial portion of the air toxics problem may, in fact, be caused by much smaller, diverse sources of these air pollutants." These smaller sources, the area sources, were not effectively regulated by the statutory mechanisms available to EPA at that time.

In many cases, the authorities of section 112 (promulgation of emissions standards or alternative design and work practices standards) would have been cumbersome tools, at best, to achieve reductions in pollution from these sources. The Agency, therefore, turned to other authorities in the Clean Air Act (new source performance standards and mobile source tailpipe standards) and other statutes (the Toxic Substances Control Act principally) to develop the

⁸ 136 Cong. Rec. S3768 (daily ed. April 3, 1990) (statement of Sen. Symms).

⁹ 136 Cong. Rec. S3769 (daily ed. April 3, 1990) (emphasis added).

needed tools . . . The new section 112(k) proposed in this legislation builds on the Agency's plans to address this portion of the air toxics problem.¹⁰

Thus, the purpose of Section 112(k) is to enable EPA to act against HAPs which are not readily controlled through regulations on major sources, but which are nonetheless emitted in significant amounts, *i.e.*, "the substantial portion of the air toxics problem" identified by EPA and by Congress in the legislative history. This discussion makes clear that Section 112(k) is not intended to authorize additional and unnecessary regulations on area sources that result in only minute exposure to HAPs that are actually emitted almost entirely through major sources and which are already effectively regulated by EPA. Vinyl chloride, a substance whose exposure results overwhelmingly from major sources, is not an appropriate HAP for consideration under 112(k).

VI. CONCLUSION

The inclusion of vinyl chloride in EPA's 1990 Emissions Inventory of Forty Section 112(k) Pollutants does nothing to achieve the goals set by Section 112(k) of the Clean Air Act. The emissions of vinyl chloride from area sources in urban areas are minimal and insignificant when compared with the emissions of other HAPs on the Inventory. It should be eliminated from the Inventory.

Attachment

¹⁰ S. Rep. No. 101-228, 101st Cong. 1st Sess. at 186 (1989).

1 - TRI90
FACN - 19464CCDNTARMAN
FNM - OCCIDENTAL CHEMICAL CORP.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04010080-8-PA
FAD - ARMAND HAMMER BLVD. 699
FCTY - POTTSTOWN
FST - PA
TEL - (215) 327-6715
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 138,275 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 250 lbs./rep yr - 1990
ERELT- 138,525 lbs./rep yr - 1990

2 - TRI90
FACN - 19706FRMSPSCHOO
FNM - FORMOSA PLASTICS CORP.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04520880-2-DE
FAD - 780 SCHOOLHOUSE RD.
FCTY - DELAWARE CITY
FST - DE
TEL - (302) 836-2210
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 125,282 lbs./rep yr - 1990
WT - 40 lbs./rep yr - 1990
LANDT- 2,211 lbs./rep yr - 1990
ERELT- 127,533 lbs./rep yr - 1990

3 - TRI90
FACN - 08067THBFGUSROU
FNM - BF GOODRICH
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04007664-2-NJ
FAD - RTE. 130 & PORCUPINE RD.
FCTY - PEDRICKTOWN
FST - NJ
TEL - (609) 299-5400
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 88,000 lbs./rep yr - 1990
WT - 26 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 88,026 lbs./rep yr - 1990

4 - TRI90
FACN - 77501CCDNT4403L
FNM - OCCIDENTAL CHEMICAL CORP.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04527679-3-TX

FAD - 4403 LAPORTE RD.
FCTY - PASADENA
FST - TX
TEL - (713) 884-4000
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 76,400 lbs./rep yr - 1990
WT - 18 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 76,418 lbs./rep yr - 1990

5 - TRI90
FACN - 62539BRDNCCANTR
FNM - BORDEN CHEMICALS & PLASTICS CO.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04517749-0-IL
FAD - CANTRALL RD. & VICTORY LN. RTE. 36
FCTY - ILLIOPOLIS
FST - IL
TEL - (217) 486-6506
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 75,460 lbs./rep yr - 1990
WT - 24 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 75,484 lbs./rep yr - 1990

6 - TRI90
FACN - 14304THGDY5408B
FNM - GOODYEAR TIRE & RUBBER CO.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04518125-8-NY
FAD - 5408 BAKER AVE.
FCTY - NIAGARA FALLS
FST - NY
TEL - (716) 236-2625
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 71,782 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 71,782 lbs./rep yr - 1990

7 - TRI90
FACN - 77541SHNTCS672H
FNM - SHINTECH INC.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04588773-6-TX
FAD - 5618 HWY. 332 E.
FCTY - FREEPORT
FST - TX
TEL - (409) 233-7861
MUSE - (1c) For on-site use/processing
PUSE - (2a) As a reactant

OUSE - NO DATA
AIRT - 67,151 lbs./rep yr - 1990
WT - 30 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 67,151 lbs./rep yr - 1990

8 - TRI90
FACN - 7313SVSTPL5200S
FNM - VISTA CHEMICAL CO. VISTA POLYMERS
DIV.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04509078-6-OK
FAD - 5200 S.E. 59TH ST.
FCTY - OKLAHOMA CITY
FST - OK
TEL - (405) 672-4551
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 65,700 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 65,700 lbs./rep yr - 1990

9 - TRI90
FACN - 39730VSTPLPOBOX
FNM - VISTA POLYMERS INC. VISTA POLYMERS
DIV.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04008746-8-MS
FAD - HWY. 25 P.O. BOX 91
FCTY - ABERDEEN
FST - MS
TEL - (601) 369-3618
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 63,993 lbs./rep yr - 1990
WT - 12 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 64,005 lbs./rep yr - 1990

10 - TRI90
FACN - 70734BRDNCLOUIS
FNM - BORDEN CHEMICALS & PLASTICS OPS.
L.P.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04565667-5-LA
FAD - LA HWY. 73 & 30
FCTY - GEISMAR
FST - LA
TEL - (504) 673-6121
MUSE - (1a) Produce
MUSE - (1c) For on-site use/processing
MUSE - (1d) For sale/distribution
PUSE - (2a) As a reactant
OUSE - NO DATA

AIRT - 53,426 lbs./rep yr - 1990
WT - 23 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 53,857 lbs./rep yr - 1990

11 - TRI90
FACN - 42029WSTLKHWHY15
FNM - WESTLAKE MONOMERS CORP.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04511873-0-KY
FAD - HWY. 1523 P.O. BOX 712
FCTY - CALVERT CITY
FST - KY
TEL - (502) 395-3360
MUSE - (1a) Produce
MUSE - (1d) For sale/distribution
PUSE - NO DATA
OUSE - NO DATA
AIRT - 50,000 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 50,000 lbs./rep yr - 1990

12 - TRI90
FACN - 08016CCDNTBEVER
FNM - OCCIDENTAL CHEMICAL CORP.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04007255-5-NJ
FAD - BEVERLY RD.
FCTY - BURLINGTON
FST - NJ
TEL - (609) 186-9200
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 40,300 lbs./rep yr - 1990
WT - 7 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 40,307 lbs./rep yr - 1990

13 - TRI90
FACN - 44004VYGNCMIDDL
FNM - VYGEN CORP.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04547566-8-OH
FAD - MIDDLE RD.
FCTY - ASHTABULA
FST - OH
TEL - (216) 998-1120
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 38,850 lbs./rep yr - 1990
WT - 250 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 39,100 lbs./rep yr - 1990

14 - TRI90
FACN - 19706GRGGL1685R
FNM - GEORGIA GULF CORP.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04527639-9-DE
FAD - 1685 RIVER RD.
FCTY - DELAWARE CITY
FST - DE
TEL - (302) 836-2150
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 32,809 lbs./rep yr - 1990
WT - 2 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 32,811 lbs./rep yr - 1990

15 - TRI90
FACN - 70764BFGDRRT988
FNM - BF GOODRICH CO.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04008912-0-LA
FAD - RTE. 988 RIVER RD. N.
FCTY - PLAQUEMINE
FST - LA
TEL - (504) 387-3151
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - (3c) Ancillary or other use
AIRT - 25,000 lbs./rep yr - 1990
WT - 6,600 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 31,600 lbs./rep yr - 1990

16 - TRI90
FACN - 70664CRTNTPETEM
FNM - CERTAINTED CORP.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04526416-5-LA
FAD - PETE MANENA RD.
FCTY - SULPHUR
FST - LA
TEL - (318) 882-1441
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 24,500 lbs./rep yr - 1990
WT - 1 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 24,501 lbs./rep yr - 1990

17 - TRI90
FACN - 70669VSTCHOLDSP
FNM - VISTA CHEMICAL CO. LAKE CHARLES
CHEMICAL COMPLEX
NAME - VINYL CHLORIDE
RN - 75-01-4

SUBN - 13-90-04558718-5-LA
FAD - 2201 OLD SPANISH TRAIL
FCTY - WESTLAKE
FST - LA
TEL - (318) 494-5437
MUSE - (1a) Produce
MUSE - (1d) For sale/distribution
PUSE - NO DATA
OUSE - NO DATA
AIRT - 20,388 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 20,388 lbs./rep yr - 1990

18 - TRI90
FACN - 70710CCDNTHWY1E
FNM - OCCIDENTAL CHEMICAL CORP.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04535258-0-LA
FAD - HWY. 1 & E. SID RICHARDSON RD. RD.
FCTY - ADDIS
FST - LA
TEL - (504) 383-6297
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 20,000 lbs./rep yr - 1990
WT - 8 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 20,008 lbs./rep yr - 1990

19 - TRI90
FACN - 42029PCFCWJOHNS
FNM - PACIFIC WESTERN RESIN CO.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04524770-3-KY
FAD - JOHNSON-RILEY RD.
FCTY - CALVERT CITY
FST - KY
TEL - (502) 395-2209
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 20,000 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 20,000 lbs./rep yr - 1990

20 - TRI90
FACN - 08016CCDNTRIVER
FNM - OCCIDENTAL CHEMICAL CORP.
BURLINGTON N. PLANT
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04529508-4-NJ
FAD - 1804 RIVER RD.
FCTY - BURLINGTON
FST - NJ

TEL - (609) 499-2300
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 14,400 lbs./rep yr - 1990
WT - 6 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 14,406 lbs./rep yr - 1990

21 - TRI90
FACN - 77978FRMSPPBOX
FNM - FORMOSA PLASTICS CORP. TX
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04531539-3-TX
FAD - 101 FORMOSA DR. P.O. BOX 400
FCTY - POINT COMFORT
FST - TX
TEL - (512) 987-7440
MUSE - (1a) Produce
MUSE - (1b) Import
MUSE - (1c) For on-site use/processing
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 13,500 lbs./rep yr - 1990
WT - 250 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 13,750 lbs./rep yr - 1990

22 - TRI90
FACN - 32571RPRDCERHGH
FNM - PACIFIC WESTERN RESIN CO.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04523633-2-FL
FAD - 4575 HWY. 90 E.
FCTY - PACE
FST - FL
TEL - (904) 994-1994
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 13,000 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 13,000 lbs./rep yr - 1990

23 - TRI90
FACN - 70669PPGNDCCOLUM
FNM - PPG INDUSTRIES INC.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04010422-4-LA
FAD - COLUMBIA SOUTHERN RD.
FCTY - WESTLAKE
FST - LA
TEL - (318) 491-4848
MUSE - (1a) Produce
MUSE - (1d) For sale/distribution
MUSE - (1e) As a byproduct

MUSE - (1f) As an impurity
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 10,299 lbs./rep yr - 1990
WT - 3 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 10,302 lbs./rep yr - 1990

24 - TRI90
FACN - 70765GRGGLHIGHW
FNM - GEORGIA GULF CORP.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04531644-5-LA
FAD - HWY. 405
FCTY - PLAQUEMINE
FST - LA
TEL - (504) 685-2500
MUSE - (1a) Produce
MUSE - (1c) For on-site use/processing
MUSE - (1d) For sale/distribution
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 9,300 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 9,300 lbs./rep yr - 1990

25 - TRI90
FACN - 40211BFGDR4100B
FNM - BF GOODRICH LOUISVILLE PLANT
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04005191-6-KY
FAD - 4200 BELLS LN.
FCTY - LOUISVILLE
FST - KY
TEL - (502) 772-5150
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 9,100 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 9,100 lbs./rep yr - 1990

26 - TRI90
FACN - 77541THDWCBUILD
FNM - DOW CHEMICAL CO. TEXAS OPERATIONS
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04590051-9-TX
FAD - 2301 BRAZOSPORT BLVD. BUILDING
OC-708
FCTY - FREEPORT
FST - TX
TEL - (409) 238-7623
MUSE - (1a) Produce
MUSE - (1e) As a byproduct
PUSE - (2a) As a reactant

OUSE - (3a) As a chemical processing id
OUSE - (3c) Ancillary or other use
AIRT - 8,270 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 8,270 lbs./rep yr - 1990

27 - TRI90
FACN - 70765THDMCHIGHW
FNM - DOW CHEMICAL CO. LOUISIANA DIV.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04002303-2-LA
FAD - HWY. 1 S. P.O. BOX 150
FCTY - PLAQUEMINE
FST - LA
TEL - (504) 389-8236
MUSE - (1a) Produce
MUSE - (1d) For sale/distribution
PUSE - NO DATA
OUSE - NO DATA
AIRT - 7,500 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 7,500 lbs./rep yr - 1990

28 - TRI90
FACN - 70805FRMSPGULFS
FNM - FORMOSA PLASTICS CORP.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04532176-3-LA
FAD - GULF STATES RD.
FCTY - BATON ROUGE
FST - LA
TEL - (504) 356-3341
MUSE - (1a) Produce
MUSE - (1d) For sale/distribution
PUSE - NO DATA
OUSE - NO DATA
AIRT - 7,229 lbs./rep yr - 1990
WT - 5 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 7,234 lbs./rep yr - 1990

29 - TRI90
FACN - 77571LPRIC2400M
FNM - GEON CO.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04006969-8-TX
FAD - 2400 MILLER CUTOFF RD.
FCTY - LA PORTE
FST - TX
TEL - (713) 476-8006
MUSE - (1a) Produce
MUSE - (1d) For sale/distribution
PUSE - NO DATA
OUSE - NO DATA
AIRT - 4,900 lbs./rep yr - 1990

WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 4,900 lbs./rep yr - 1990

30 - TRI90
FACN - 77592NNCRB33015
FNM - UNION CARBIDE CORP. TEXAS CITY
PLANT
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04010913-6-TX
FAD - 3301 5TH AVE. S.
FCTY - TEXAS CITY
FST - TX
TEL - (409) 948-5269
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 1,758 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 1,758 lbs./rep yr - 1990

31 - TRI90
FACN - 64120MBYCR8400H
FNM - MOBAY CORP. AG CHEM. DIV.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04005809-9-MO
FAD - 8400 HAWTHORN RD.
FCTY - KANSAS CITY
FST - MO
TEL - (816) 242-2464
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 1,313 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 1,313 lbs./rep yr - 1990

32 - TRI90
FACN - 77536BFGDR1105T
FNM - BF GOODRICH GEON VINYL DIV.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04515335-0-TX
FAD - 1105 TIDAL RD.
FCTY - DEER PARK
FST - TX
TEL - (713) 476-2218
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 1,040 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 1,040 lbs./rep yr - 1990

33 - TRI90

FACN - 48667THDWMICHI
FNM - DOW CHEMICAL USA MIDLAND SITE
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04008093-1-MI
FAD - 1261 BUILDING
FCTY - MIDLAND
FST - MI
TEL - (517) 636-5783
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 923 lbs./rep yr - 1990
WT - 10 lbs./rep yr - 1990
LANDT- 14 lbs./rep yr - 1990
ERELT- 947 lbs./rep yr - 1990

34 - TRI90
FACN - 91350KYSRC26000
FNM - KEYSOR-CENTURY CORP.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04502567-7-CA
FAD - 26000 SPRINGBROOK AVE.
FCTY - SAUGUS
FST - CA
TEL - (805) 259-2360
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 820 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 820 lbs./rep yr - 1990

35 - TRI90
FACN - 46016GNRLM2915P
FNM - GMC INLAND FISHER GUIDE
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04533829-0-IN
FAD - 2915 PENDLETON AVE.
FCTY - ANDERSON
FST - IN
TEL - (317) 641-5032
MUSE - NO DATA
PUSE - (2c) As an article component
OUSE - NO DATA
AIRT - 500 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 500 lbs./rep yr - 1990

36 - TRI90
FACN - 42029RPRDCHIGHW
FNM - AIR PRODUCTS & CHEMICALS INC.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04011066-0-KY
FAD - HWY. 95

FCTY - CALVERT CITY
FST - KY
TEL - (502) 395-4181
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 500 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 500 lbs./rep yr - 1990

37 - TRI90
FACN - 70734VLCNMASHLA
FNM - VULCAN MATERIALS CO. CHEMICALS DIV.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04008462-4-LA
FAD - ASHLAND RD.
FCTY - GELSMAR
FST - LA
TEL - (504) 473-5026
MUSE - (1a) Produce
MUSE - (1c) For on-site use/processing
MUSE - (1e) As a byproduct
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 410 lbs./rep yr - 1990
WT - 1 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 411 lbs./rep yr - 1990

38 - TRI90
FACN - 45417NLNDD2701H
FNM - GMC DELCO CHASSIS DIV. HOME AVE.
OPS.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04526378-3-OH
FAD - 2701 HOME AVE.
FCTY - DAYTON
FST - OH
TEL - (313) 986-5719
MUSE - NO DATA
PUSE - (2b) As a formulation component
OUSE - NO DATA
AIRT - 351 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 151 lbs./rep yr - 1990

39 - TRI90
FACN - 67215VLCNC6200S
FNM - VULCAN CHEMICALS
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04554934-8-KS
FAD - 6200 S. RIDGE RD.
FCTY - WICHITA
FST - KS
TEL - (316) 529-7385

MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 11 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 181 lbs./rep yr - 1990

40 - TRI90
FACN - 75041NNCRB2326L
FNM - UNION CARBIDE CHEMICALS & PLASTICS
INC.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04010043-0-TX
FAD - 2326 LONNECKER DR.
FCTY - GARLAND
FST - TX
TEL - (214) 864-6100
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 113 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 113 lbs./rep yr - 1990

41 - TRI90
FACN - 77536CCDNTTIDAL
FNM - OCCIDENTAL CHEMICAL CORP. VCM SITE
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04004449-3-TX
FAD - 1000 TIDAL RD.
FCTY - DEER PARK
FST - TX
TEL - (713) 476-2266
MUSE - (1a) Produce
MUSE - (1d) For sale/distribution
PUSE - NO DATA
OUSE - NO DATA
AIRT - 87 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 87 lbs./rep yr - 1990

42 - TRI90
FACN - 90503NNCRB19206
FNM - UNION CARBIDE CORP.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04575326-4-CA
FAD - 19206 HAWTHORNE BLVD.
FCTY - TORRANCE
FST - CA
TEL - (310) 214-5316
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 31 lbs./rep yr - 1990

WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 31 lbs./rep yr - 1990

43 - TRI90
FACN - 70057NNCRBHWY31
FNM - UNION CARBIDE CORP. TAFT/STAR
COMPLEX
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04010296-6-LA
FAD - LA. HWYS. 18 & 3142
FCTY - HAHNVILLE
FST - LA
TEL - (468) -44-72
MUSE - (1e) As a byproduct
PUSE - NO DATA
OUSE - NO DATA
AIRT - 28 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 28 lbs./rep yr - 1990

44 - TRI90
FACN - 77571CCDNT1800V
FNM - OCCIDENTAL CHEMICAL CORP.
BATTLEGROUND SITE
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04010404-6-TX
FAD - 1800 VISTA RD.
FCTY - LA FORTE
FST - TX
TEL - (713) 476-2900
MUSE - NO DATA
PUSE - NO DATA
OUSE - (3c) Ancillary or other use
AIRT - 10 lbs./rep yr - 1990
WT - 5 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 15 lbs./rep yr - 1990

45 - TRI90
FACN - 30084NNCRB2043S
FNM - UNION CARBIDE CHEMICALS & PLASTICS
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04569218-7-GA
FAD - 2043 STEEL DR.
FCTY - TUCKER
FST - GA
TEL - (404) 496-7100
MUSE - NO DATA
PUSE - (2a) As a reactant
OUSE - NO DATA
AIRT - 12 lbs./rep yr - 1990
WT - NO DATA
LANDT- 0 lbs./rep yr - 1990
ERELT- 12 lbs./rep yr - 1990

46 - TRI90
FACN - 28690LBWLD201ST
FNM - ALBA-WALDENSIAN INC.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04561023-5-NC
FAD - 201 ST. GERMAIN AVE. S.W.
FCTY - VALDESE
FST - NC
TEL - (704) 879-6511
MUSE - NO DATA
PUSE - NO DATA
OUSE - (3b) As a manufacturing aid
AIRT - 0 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 0 lbs./rep yr - 1990

47 - TRI90
FACN - 30650WLLNG1251L
FNM - WELLINGTON LEISURE PRODS. INC.
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04561746-9-GA
FAD - 1251 LIONS CLUB RD. P.O. BOX 244
FCTY - MADISON
FST - GA
TEL - (404) 342-1916
MUSE - NO DATA
PUSE - (2c) As an article component
OUSE - NO DATA
AIRT - 0 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 0 lbs./rep yr - 1990

48 - TRI90
FACN - 78359CCDNTHWY36
FNM - OCCIDENTAL CHEMICAL CORP. CORPUS
CHRISTI PLANT
NAME - VINYL CHLORIDE
RN - 75-01-4
SUBN - 13-90-04568254-1-TX
FAD - HWY. 361
FCTY - GREGORY
FST - TX
TEL - (512) 776-6015
MUSE - (1a) Produce
MUSE - (1d) For sale/distribution
PUSE - NO DATA
OUSE - NO DATA
AIRT - 0 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 0 lbs./rep yr - 1990

49 - TRI90
FACN - 64735RVLMTN1001G
FNM - RIVAL CO.
NAME - VINYL CHLORIDE

RN - 75-01-4
SUBN - 13-90-04582303-4-MO
FAD - 1001 GOLDEN DR.
FCTY - CLINTON
FST - MO
TEL - (816) 885-5564
MUSE - NO DATA
PUSE - (2c) As an article component
OUSE - NO DATA
AIRT - 0 lbs./rep yr - 1990
WT - 0 lbs./rep yr - 1990
LANDT- 0 lbs./rep yr - 1990
ERELT- 0 lbs./rep yr - 1990

[TRI90] SS 2 /cf?

USER:

SL 109604

TOTAL P.020