DCN PH4A004
COMMENTER Heritage Environmental Services
RESPONDER RE
SUBJECT SCRP
SUBJNUM 004
COMMENT Scrap Metal Heritage agrees with EPA's conclusion that scrap metal is a valuable national resource, the recycling of which should be encouraged. In addition, scrap metal has little potential for release of hazardous constituents to the environment. Therefore, Heritage supports EPA's proposal to exempt processed scrap metal that is recycled from the definition of solid waste. Heritage further encourages EPA to include unprocessed scrap metal that is recycled in the exemption from the definition of solid waste. While Heritage does not have hard data demonstrating unprocessed scrap metal is a similarly minimal environmental risk, it is intuitive that if it is destined for recycling it: a) has undergone some minimal processing, such as collection for shipment, dismantling of equipment, or sizing prior to shipping to a scrap dealer, smelter, mill or foundry; b) has economic value as it will eventually be processed and sold in a manner similar to processed scrap metal; c) is just as analogous to raw metal concentrates as process scrap metal; and d) has the same end market (i.e., scrap metal reclamation) as processed scrap metal, otherwise it would not be destined for recycling. If EPA determines it will not exempt all scrap metal destined for recycling from the definition of solid waste, Heritage supports maintaining the existing exclusion from the definition of hazardous waste for recycled scrap metal other than processed scrap metal. Heritage would like to point out that some scrap metal is marketed directly to the foundry, mill or smelter without the involvement of a scrap metal dealer trading-on the recycling market. As currently written, EPA's rule appears to exclude scrap metal that is not handled by scrap metal dealers. The exemption should apply to all scrap metal destined for recycling, whether it has passed through the hands of a scrap metal dealer or not. In fact, it seems a more environmentally sound method of management to ship scrap metal directly from the generator to the mill, foundry or smelter. This eliminates the additional shipping and storage at a scrap processor's site that could potentially result in a negative environmental impact. In addition to the preceding comments, Heritage requests that EPA further clarify the -definition of "processed scrap metal". For

example, would a decommissioned steel tank cut to meet the size specification of a scrap metal dealer or foundry be considered processed scrap metal, even though the tank was cut on-site and the process was not performed by a scrap metal recycler? As another example, would piping, pumps or other processing equipment dismantled for shipment to a scrap dealer or foundry be considered processed scrap metal, even though the work was performed by a demolition contractor and not a scrap metal recycler?

RESPONSE:

The Agency thanks the commenter for supporting the proposed exclusion for processed scrap metal. The commenter raised a number of additional issues and concerns. First, the commenter suggests that EPA expand its exclusion to cover all scrap metal being recycled. The commenter asserts that the five factors that EPA used to evaluate whether processed scrap metal is "commodity-like"as used in 40 CFR §260.31 apply equally to unprocessed scrap metal being recycled. In response to information provided by similar commenters, EPA identified and analyzed three different types of unprocessed scrap metal to determine whether the scope of the exclusion should be expanded: home scrap metal, prompt scrap metal and obsolete scrap metal. Home scrap is scrap metal generated by steel mill, foundries, and refineries such as turnings, cuttings, punchings, and borings. Prompt scrap, also known as industrial or new scrap metal, is generated by the metal working/fabrication industries and includes such scrap metal as turnings, cuttings, punchings, and borings. Obsolete scrap metal is composed of worn out metal or a metal product that has outlived it original use, such as automobile hulks, railroad cars, aluminum beverage cans, steel beams from torn down buildings, and household appliances.

The Agency used five factors to evaluate partially-reclaimed solid wastes to determine if it is appropriate to exclude a waste from RCRA Subtitle C jurisdiction (40 CFR §260.31(c)). The five factors are: 1) the degree of processing the material has undergone and the degree of further processing that is required, 2) the value of the material after it has been reclaimed, 3) the degree to which the reclaimed material is like an analogous raw material, 4) the extent to which an end market for the reclaimed material is guaranteed, and 5) the extent to which a material is managed to minimize loss. The Agency applied these five factors to the three categories of unprocessed scrap metal to determine if these categories are “commodity-like” (as used in 40 CFR §260.31(c)) and not part of the waste management problem.

The Agency evaluated unprocessed home scrap and prompt scrap against each of the five factors and found that these categories of scrap metal are substantially similar to processed scrap metal due to the availability of established markets for the material’s utilization, inherent positive economic value of the material, the physical form of the material, and absence of damage incidents attributable to the material. However, the Agency has not found sufficient data to justify an exclusion for unprocessed obsolete scrap metal at this time.

Based on its analysis, the Agency has determined that the scope of the exclusion should be expanded to include unprocessed home and prompt scrap metal. The Agency is not expanding

the scope of the exclusion from the definition of solid waste to include obsolete scrap metal. Providing an exclusion from the definition of solid waste for obsolete scrap metal at this time would be premature and is better addressed in the Definition of Solid Waste rulemaking, due to be proposed in the near future.

The commenter also pointed out that the rule, as written, appears to exclude materials from the definition of processed scrap metal if the processing does not occur at a scrap metal dealer. The language in the proposal was not intended to limit the exclusion in this way. In the final rule the Agency clarifies that the exclusion for processed scrap metal being recycled applies to scrap metal that has under gone a processing step (as defined in the preamble to the proposed rule) regardless of who does the processing. In other words, a processing step may be performed by the generator, an intermediate scrap handler (e.g., broker, scrap processor), or a scrap recycler. Once the scrap metal has undergone a processing step, it may qualify for the exclusion from the definition of solid waste.

The commenter also asks for further clarification of the term "processed scrap metal" and gives examples of generators who perform some work on scrap metal before sending it off-site. In response to this commenter and other commenters who requested more specifically defined processes in the definition of "processed scrap metal," the Agency is adding certain processes to the definition. Specifically, the Agency is adding chopping crushing, flattening, cutting and sorting to the types of processes that qualify as "processed scrap metal." Therefore, in the first example, a tank that is cut at a generator site prior to shipment to a scrap metal dealer or foundry would meet the definition of "processed scrap metal" after the first processing step at the generator site. Additionally, in the second example, equipment that is dismantled and shipped to a scrap dealer or foundry also would qualify as processed scrap metal, as dismantling (i.e., manual separation) of the equipment serves to improve the handling of the material.

COMMENTER Heritage Environmental Services
RESPONDER RE

SUBJNUM 004
COMMENT Heritage also supports EPA's proposal to exempt shredded circuit

waste. However, Heritage does not understand why EPA does not
extend this exemption to whole circuit boards and make this

unnecessarily obtuse by allowing the exemption of whole circuit
boards from the definition of hazardous waste as "scrap metal"

proposed rule. Very few members of the regulated community have
access to, or the time for reading, unpublished internal

facilitate recovery of circuit boards and does not feel it
inappropriate to manage whole circuit boards differently than

publish an exemption from the definition of solid waste for
whole and shredded circuit boards with appropriate management

RESPONSE:

EPA thanks the commenter for supporting the shredded circuit board exclusion from the

circuit boards.

Since 1992, used whole boards are classified as scrap metal and therefore when recycled

RCRA regulatory requirements such as manifesting, export or storage permit requirements
currently operate as disincentives to environmentally sound recycling of these materials. Used

to list individually all items that meet the definition of scrap metal. The exclusion from RCRA
jurisdiction for used shredded circuit boards is necessary only because they do not qualify for the

serve as disincentives to their recovery. EPA also believes that because whole used circuit boards
are classified as scrap metal, excluding whole used boards from the definition of solid waste is not

the Agency’s current definition of scrap metal.

DCN PH4A006
COMMENTER Department of Energy
RESPONDER RE
SUBJECT SCRP
SUBJNUM 006
COMMENT EPA is proposing to amend the definition of solid waste by excluding processed scrap metal being recycled from RCRA jurisdiction. The Agency is also proposing to exclude shredded circuit boards destined for metal recovery that are managed in containers during storage and shipment prior to recovery from the definition of solid waste to facilitate recovery of this material. DOE generally supports these proposed regulatory changes in that they will facilitate and expedite the recycling of two types of materials which are managed at certain DOE facilities. Moreover, by minimizing the regulatory and reporting burdens associated with these recoverable materials, the proposed regulatory changes provide economic impetus that should benefit the regulated community and the recycling industry.

RESPONSE:

The Agency thanks the commenter for supporting the proposed exclusions from the definition of solid waste for scrap metal and shredded circuit boards being recycled.

DCN PH4A006
COMMENTER Department of Energy
RESPONDER RE
SUBJECT SCRP
SUBJNUM 006
COMMENT Other RCRA Issues: Exclusion of Processed Scrap Metal and Shredded Circuit Boards from the Definition of Solid Waste LA. Processed Scrap Metal Being Recycled IA.2. Background 1. D. 2361, col. 3 - EPA describes the proposed exclusion of processed scrap metal being recycled by referring to its "commodity-like" nature and to the Agency's belief that "processed scrap metal being recycled should be excluded from the definition of solid waste because this type of material has not been shown to be part of the waste disposal problem." EPA also describes the existing regulatory exemption from regulation under RCRA Subtitle C of all scrap metal being recycled as "an interim measure to allow the Agency to study scrap metal management." As explained in the preamble, EPA has heretofore exempted all scrap metal being recycled from regulation under RCRA Subtitle C, but not from the definition of solid waste in 40 CFR 261.2. The definition of hazardous waste pursuant to 40 CFR 261.3 is specifically limited to those wastes defined under 40 CFR 261.2 as solid wastes. Thus the definition of hazardous waste would not include processed scrap metal being reclaimed under the proposed exclusion. Under the mixture rule [ºº261.3(a)(2)(iii) and (iv)], mixtures of solid wastes with listed hazardous wastes, and mixtures of solid wastes and hazardous wastes that exhibit hazardous waste characteristics, are regulated as hazardous. Considering the above-mentioned regulatory provisions and the proposal to amend the definition of solid waste by excluding processed scrap metal being recycled from RCRA jurisdiction, clarification is requested as to the regulator status and exact applicability of the RCRA regulations to the potential situation where scrap metal (i.e., processed scrap metal being reclaimed) is contaminated with a hazardous waste residue.

RESPONSE:

The commenter requests clarification on the applicability of the RCRA regulations to scrap metal which is contaminated with hazardous waste residues. The commenter is correct in concluding that the mixture rule (40 CFR 261.3(a)(2)(iii) and (iv)) does not apply to excluded scrap metal. The mixture rule applies to hazardous waste that is mixed with solid waste. Under

today's final rule, excluded scrap metal being recycled is not a solid waste, therefore the mixture rule does not apply. Today's exclusion is not intended to modify the existing definition of scrap metal. Therefore, the determination as to whether a waste meets the definition of scrap metal has not changed and is made at the point of generation. Under the definition of scrap metal, a secondary material from smelting and refining operations (e.g., slags, drosses, and sludges), liquid wastes containing metals (e.g., spent acids and caustics), liquid metal wastes (e.g., liquid mercury), and metal-containing wastes with a significant liquid component (e.g., spent lead acid batteries) do not meet the definition of scrap metal and therefore also are not classified as processed scrap metal. If, at the point of generation, a secondary material has enough hazardous waste residue to constitute a “significant liquid component,” the material would not qualify as a scrap metal. For example, if a tank is being decommissioned, and it has some hazardous residue on the bottom, the tank may not qualify as scrap metal if the implementing agency determines that the residues constitute a significant liquid component. In order to meet the definition of processed scrap metal, the material must first meet the definition of scrap metal. Therefore, any distinct components that are separated from a scrap metal that would not otherwise meet the current definition of scrap metal would not meet the definition of processed scrap metal. The separated material would be a newly generated waste and therefore subject to a hazardous waste determination. If this newly generated waste is a hazardous waste, then the waste must be handled as hazardous waste.

DCN PH4A006
COMMENTER Department of Energy
RESPONDER RE
SUBJECT SCRP
SUBJNUM 006
COMMENT Definition of Processed Scrap Metal 1. D. 2361, col. 3 - p. 2362, col. I - EPA describes the scope of the proposed scrap metal exclusion (i.e., it is "restricted to scrap metal which has been processed by scrap metal recyclers to be traded on recycling markets for further reprocessing into metal end products"), offers a definition of "processed" scrap metal, and introduces the terms "unprocessed" and "partially processed" scrap metal. EPA further limits the extent of the exclusion by stating that "processed scrap metal does not include any distinct components separated from unprocessed or partially processed scrap metal that would not otherwise meet the current definition of scrap metal." The definition for "processed scrap metal" is clearly described in the proposed amendment to the regulatory language for 261.1(c)(9). The Agency should consider equally explicit definitions for "unprocessed" and "partially processed" scrap metal. Furthermore, clarification would be helpful in regards to the points(s) at which processing may take place [i.e., relative to the proposed exclusion of processed scrap metal being recycled]. As described in the preamble to the supplemental notice, the proposed exclusion (and associated definition) of processed scrap metal is "restricted to scrap metal which has been processed by scrap metal recyclers" [emphasis added]. The preamble and proposed regulatory language [61 FR 2371; §261.1(c)(9)] also provide a reasonable set of criteria for what is meant by "processing" of scrap metal. However, clarification is not offered as to who does and does not belong to the community of 'scrap metal recyclers.' Thus, it is possible that anyone who carries out the processes described qualifies as a "scrap metal recycler," and thus, would be eligible for the exclusion. DOE requests that EPA clarify its intent concerning the qualifications of "scrap metal recyclers." The term partially processed" scrap metal is introduced in the preamble but is not defined, nor is it included in the proposed regulatory language. It can be inferred that scrap metal-that still contains "distinct components ... that would not otherwise meet the current definition of scrap metal" would be considered partially processed, and would not be eligible for the exclusion. DOE

suggests that, if "partially processed" is intended to provide a meaningful distinction to generators and recyclers of scrap metal, EPA should provide specific clarification or guidance on how to distinguish this from of scrap metal, and on the consequences relative to the proposed exclusion. Such clarification or guidance would help the regulated community determine whether scrap metal containing certain "distinct components" could be subject to the proposed exclusion. Clarification is requested in regards to whether the applicability of the exclusion would be affected by the point at which processing is conducted -- e.g., the scrap metal is "processed" at the point of generation (by the generator) versus by a commercial "processing" facility. Guidance on practices considered to be manual separation methods at the point of generation, and the applicability of speculative accumulation requirements per 261.2 to the proposed exclusion would also be useful.

RESPONSE:

The commenter requests clarification on several different topics: the definition of partially processed scrap metal and unprocessed scrap metal; whether a scrap metal recycler must be used to qualify for the proposed exclusion; and the point at which the exclusion for processed scrap metal takes effect, and the applicability of the speculative accumulation requirements.

In regard to the first issue, EPA used the terms “unprocessed” and “partially processed” scrap metal in the preamble to clarify the term “processed scrap metal.” Partially processed scrap metal was used in the preamble as a way of indicating that the processed scrap metal need not be completely recycled, but may have completed one of several steps in the process of recycling the material. For instance, scrap metal that has been cut and sorted by the generator prior to being sent to a scrap metal recycler would meet the definition of processed scrap metal. The term partially processed scrap metal was intended to convey this type of activity. Therefore, in the context of the final rulemaking, the term “partially processed scrap metal” has the same meaning as the term “processed scrap metal.” The term “unprocessed scrap metal” covers the universe of scrap metal which does not fall within the definition and scope of processed scrap metal.

The commenter also pointed out that the rule, as written, appears to exclude materials from the definition of processed scrap metal if the processing does not occur at a scrap metal dealer. The language in the proposal was not intended to limit the exclusion in this way. In the final rule the Agency clarifies that the exclusion for processed scrap metal being recycled applies to scrap metal that has under gone a processing step (as defined in the preamble to the proposed rule) regardless of who does the processing. In other words, a processing step may be performed by the generator, an intermediate scrap handler (e.g., broker, scrap processor), or a scrap recycler.

The commenter requested clarification concerning whether the applicability of the

exclusion would be affected by the point at which the processing is conducted. As discussed in the preceding section, the exclusion for processed material is not effective until the scrap metal has been processed. Once the scrap metal has undergone a processing step, it may qualify for the exclusion from the definition of solid waste. And finally, in today's final rule, the exclusions for excluded scrap metal and shredded circuit boards being recycled are not condidtioned on speculative accumulation requirements.

DCN PH4A006
COMMENTER Department of Energy
RESPONDER RE
SUBJECT SCRP
SUBJNUM 006
COMMENT Shredded Circuit Boards 1. D. 2362, col. 3 - v. 2363, col. 2 - EPA is proposing to exclude shredded circuit boards destined for metal recovery that are managed in containers during storage and shipment (prior to recovery) from the definition of solid waste in order to facilitate recovery of this material. Used whole (i.e, intact) circuit boards sent for reclamation may be considered to be scrap metal and may therefore be exempt from RCRA regulation. Used whole circuit boards, however, do not meet the definition of processed scrap metal (thus, the proposed exclusion for processed scrap metal would not apply to these materials). DOE supports EPA's proposal to exclude shredded circuit boards from the definition of solid waste when such materials are managed in containers during storage and shipment prior to recovery. However, as discussed in the following paragraphs, the Department requests clarification in regards to certain issues and terms associated with the management of circuit boards destined for recovery. Under the proposed exclusion, shredded circuit boards that would potentially exhibit a hazardous characteristic would remain outside of RCRA hazardous waste regulation. It would be useful to the regulated community if EPA were to provide clarification in the final rule explaining that shredded circuit boards managed in containers need not be characterized (i.e., analyzed using the TCLP) and that there are no time limitations associated with the storage of shredded circuit boards subject to the exclusion. In the preamble, EPA uses two expressions (specifically, "properly containerized" and "managed in containers") in describing how shredded circuit boards must be stored and shipped to qualify for the proposed exclusion from the definition of a solid waste. If it is EPA's intent that the types of containers typically used to ship shredded circuit boards will suffice for the purposes of the proposed exclusion, then the term "properly containerized" should be removed in favor of language such as "managed in containers". Use of the term "properly containerized" is vague (without further clarification) and therefore open to a range of interpretations. EPA acknowledges that processing through "shredders, hammer mills, and similar devices to decrease the size of the boards" is common (p. 2362,

col.3). DOE requests EPA to clarify whether, and under what circumstances, such volume-reduction measures are to be considered treatment of hazardous waste. Compactible solid waste material (such as Tyvek or paper) is routinely compacted to remove void spaces and maximize the efficiency of the container. There are instances where States have required treatment permits for volume reduction measures such as compacting, hammering, or shredding. DOE believes in general that volume-reduction measures that do not alter the fundamental physical, chemical, or biological character of the material, and are not intended to remove or reduce the hazardous nature of the material in any way, should not be considered "treatment". As such, no permits for this type of activity should be necessary.

RESPONSE:

EPA thanks the commenter for supporting the exclusion from the definition of solid waste for shredded circuit boards that are reclaimed or recovered. The commenter requested clarification regarding several issues: whether shredded circuit boards managed in containers need to be characterized; whether there is a time limit for storage; how the Agency defines or characterizes the phrase “properly containerized;” and whether volume reduction techniques (such as compacting) are considered treatment.

In regard to the first issue, whether shredded circuit boards managed in containers require hazardous waste characterization, the Agency is not modifying the current regulations. Under 40 CFR §262.11, generators are required to determine if a waste is hazardous only if they generate a solid waste. Therefore, if the shredded circuit boards are in compliance with the exclusion from the definition of solid waste, the generator would not be required to perform a hazardous waste characterization. However, the commenter should be aware that under 40 CFR §261.2(f), if a material is excluded from the definition of solid waste, the claimant must provide appropriate documentation to demonstrate that the material is excluded from regulation and therefore it need not be characterized.

The commenter also requested clarification of whether there is a time limit for storage of shredded circuit boards that are excluded from the definition of solid waste. In the final rule, EPA is placing the exclusion from the definition of solid waste for shredded circuit boards under 40 CFR §261.4(a)(13). This exclusion is not conditioned on the speculative accumulation provisions and therefore those particular storage requirements do not apply to these materials.

The commenter requested clarification concerning how the Agency defines “properly containerized.” In the preamble of the proposed rule, the Agency stated that the exclusion for shredded circuit boards was contingent upon the shredded circuit board being “properly containerized.” In the final rule, the Agency codified the exclusion to state that shredded circuit boards are excluded from the definition of solid waste only if they are stored in containers that are sufficient to prevent a release to the environment. Although the final rule does not define

"sufficient to prevent a release to the environment," the Agency would consider a claimant to be in compliance if they can show that the container intended to hold the shredded circuit boards is sufficiently sound to carry the material to its intended destination without any possibility of a leak or emission into the environment.

Lastly, the commenter asked whether volume reduction techniques (such as compacting) are considered treatment. Since the definition of treatment under §260.10 is such a broad definition, volume reduction techniques of wastes defined as hazardous could be considered treatment under an implementing agency interpretation. However, when the exclusion for shredded circuit board becomes effective, whole boards destined for recycling will be exempt from the definition of hazardous waste, and shredded boards will be excluded from the definition of solid waste. Assuming that all handlers stay in compliance with the conditions of the exclusion, there will not be any point in the generation and recycling of printed circuit boards that hazardous waste is being handled. If waste defined as hazardous is not being handled, treatment can not occur.

DCN PH4A009
COMMENTER IPC
RESPONDER RE
SUBJECT SCRP
SUBJNUM 009
COMMENT As the trade association representing the US electronic interconnection industry, the Institute for Interconnecting and Packaging Electronic Circuits (IPC), would like to submit these comments on the proposed rule that would exclude shredded circuit boards from the Resource Conservation and Recovery Act (RCRA) definition of solid waste as long as the boards are destined for metal recovery and are managed in containers during storage and shipment prior to recovery. The proposed rule was published in the Federal Register on January 25, 1996 (61 Fed. Reg. 2338). IPC represents approximately 1900 companies in the electronic interconnection industry. Our regular membership includes companies that produce bare printed circuit boards (which are commonly referred to as printed wiring boards in the industry) as well as companies that produce electronic assemblies by attaching electric components to bare PWBS. IPC members also include suppliers to the industry as well as major original equipment manufacturers (OEMS) that use PWBs in their own products. These products include consumer electronics as well as more sophisticated industrial and military electronic systems. In addition, the IPC membership includes over 100 representatives from government and academia with vital interests in this crucial technology. IPC and its member companies are committed towards improving the environmental performance of the PWB industry. IPC is actively involved in the EPA's Common Sense Initiative, participating as an industry representative on its Computers and Electronics Subcommittee. That Subcommittee is examining barriers to pollution prevention in the computers and electronics industries, and has identified RCRA's solid waste definition as a barrier to increased materials reuse and recycling. IPC is also working with EPA's Design for the Environment project which is examining and testing alternatives to PWB manufacturing processes that may result in better environmental performance.

IPC would like EPA to comment on why F006 sludge has not been selected for exclusion from EPA's solid waste definition. Like shredded boards, F006 sludge contains high levels of valuable reusable and recyclable materials -namely, precious

metals. F006 sludge can also be easily containerized during storage and shipment prior to recovery. Given the reasoning that EPA used to exclude shredded circuit boards from the definition of solid waste in the proposed rule, EPA could also exclude F006 wastewater sludge from the definition of solid waste. Excluding F006 wastewater sludge from the definition of solid waste would go a long way towards encouraging facilities to recycle this metal-rich material. 1.7.3 The National Mining Association has proposed that the EPA provide an exclusion for metal-bearing secondary materials from outside industries (e.g., electroplating sludge from the metal finishing industry, F006) that are processed within the primary mineral processing industry. EPA has contended, however, that such an exclusion is "beyond the scope of this rulemaking." The EPA states that the scope of the rulemaking is "to amend the solid waste definition specifically for the mineral processing industry at this time in order to most accurately set out the scope of land disposal prohibition and treatment standard for mineral processing waste." 61 Fed. Reg. at 2348. IPC contends, however, that since EPA is addressing industries other than the mineral processing industry in this proposed rule as well as the recovery of materials generated by such industries (e.g., processed scrap metal, shredded circuit boards), the exclusion of F006 wastewater sludge, which is a significant by-product of the printed circuit board industry, is indeed within the "scope of this rulemaking".

RESPONSE:

The Agency still supports that expanding the exclusion to include F006 is beyond the scope of this rulemaking. EPA is currently working on a proposed rule to amend the definition of solid waste and believes that effort is the correct forum to address the status of any additional materials.

DCN PH4A009
COMMENTER IPC
RESPONDER RE
SUBJECT SCRP
SUBJNUM 009
COMMENT IPC would also like EPA to expressly verify in the public record that EPA has determined that spent solder baths, also known as "pot dumps," meet the definition of scrap metal and, therefore, are not subject to RCRA solid waste regulations as long as they are being reclaimed. Jeffrey Denit, Acting Director of EPA's Office of Solid Waste, sent a letter to the Lead Industries Association on September 20, 1993, stating that the EPA has determined that spent solder baths meet the definition of scrap metal when reclaimed and, therefore, are not defined as solid waste under RCRA (see Attachment). Many IPC members are unaware of this EPA determination and, therefore, treat their spent solder baths as RCRA-regulated solid waste despite the fact that EPA has determined that such treatment is unnecessary. It is important for EPA's internal determinations to be disseminated to regulated entities, particularly when such determinations represent a cost savings to the industry. As a result, IPC requests EPA to include spent solder baths in the definition of scrap metal in the Code of Federal Regulations.

RESPONSE:

In response to the commenter's request that the interpretation of the regulatory status of secondary materials associated with the generation or management of printed circuit boards be made available in a rulemaking, rather than solely in the form of an interpretive letter, EPA is publishing a clarification of the regulatory status of these materials (including pot dumps) in the preamble to the final rule. Spent solder baths meet the definition of scrap metal and are therefore excluded from RCRA regulation under the regulatory exclusion for scrap metal being recycled. It is not practical for the Agency to list individually all items that meet the definition of scrap metal.

DCN PH4A009
COMMENTER IPC
RESPONDER RE
SUBJECT SCRP
SUBJNUM 009
COMMENT IPC applauds EPA for proposing to exclude shredded circuit boards from the RCRA definition of solid waste. This exclusion will remove shredded circuit boards from the jurisdictional reach of RCRA Subtitle C which, when triggered, requires solid waste generators to comply with costly and administratively burdensome hazardous waste management practices. The costs and administrative burdens associated with Subtitle C management discourage the recovery and reuse of materials contained in substances that are characterized as hazardous under RCRA. As a result, the proposed rule will encourage the reuse and recycling of materials contained in shredded circuit boards and will greatly assist the PWB industry improve its environmental performance.

EPA's proposed rule represents a reasonable approach to the RCRA classification of solid waste, which acknowledges that materials, even those in a "waste-like" stage (i.e., shredded), should not be classified as a solid waste if they contain valuable reusable and/or recyclable materials, such as precious metal, if their constituents can be containerized during storage and shipment prior to recovery, and if they are destined for materials recovery.

> IPC applauds EPA for acknowledging that the regulatory costs and administrative burdens associated with RCRA solid waste management can operate as a deterrent to the successful reuse and recycling of materials, particularly those that are generated as a by-product of manufacturing processes. EPA's proposed rule, excluding shredded circuit boards from the RCRA definition of solid waste, will go a long way towards removing that disincentive. However, since the proposed rule applies only to shredded circuit boards, IPC urges EPA to use the reasoning behind the proposed rule to craft a multi-purpose exclusion rule that will achieve greater environmental gains through increased reuse and recycling for all industries. For example, EPA could issue a proposed rule, which could be used to exclude materials that contain high levels of valuable constituents with high reuse and/or recyclability potential (e.g., precious metals) as long as they are sufficiently containerized when stored or shipped and as long as they are destined for metals recovery. IPC would like EPA to comment on the feasibility of proposing such a multi-industry solid waste exclusion rule that builds on EPA's current scrap metal exclusion.

RESPONSE:

The Agency thanks the commenter for supporting the exclusion for shredded circuit boards that are being reclaimed or recycled from the definition of solid waste. The Agency notes that the exclusion from the definition of solid waste for shredded circuit boards is being

promulgated based upon an analysis of the available nformation on the characterization and management of these wastes against the five factors that the Agency has established for

and of itself was not the only reason the Agency concluded that shredded circuit boards should be excluded from the definition of solid waste. The other five factors support this determination

EPA further notes for the commenter that the Agency will be addressing broader issues and clarifications related to the definition of solid waste in a future rulemaking. Modifying the

rulemaking and is more appropriately addressed in the context of the Definition of Solid Waste rulemaking, which will be proposed in the near future. The definition of solid waste rulemaking is

However, the Agency points out that any party may petition the EPA or state, if authorized, for a variance from classification as a solid waste for materials that are partially reclaimed. Partially

reclamation, the resulting material is "commodity-like." The Regional Administrator will evaluate such a petition and make a determination based on the evaluation factors for determining whether

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DCN PH4A011
COMMENTER NY State Dept. of Environ
RESPONDER RE
SUBJECT SCRP
SUBJNUM 011
COMMENT EPA proposes to exclude processed scrap metal being recycled from RCRA jurisdiction. "Processed scrap metal" means scrap metal that has undergone sorting or processing that separates out non-metal materials. The Department agrees that a material which has been processed to the point that it has become equivalent to a product or raw material in quality would be excluded from RCRA jurisdiction as a "commodity" when used or reused. EPA should emphasize, however, that any residues generated by the processing of scrap metal are not scrap metal and if such residues exhibit a waste characteristic, or are derived from a listed hazardous waste, they would be subject to full regulation under Subtitle C. EPA only partially addresses this in paragraph 2 of page 2362. Page 2362, paragraph 2 suggests that items can qualify as scrap metal even though they include components such as batteries and mercury switches which, when separated, cannot themselves qualify as processed scrap metal. This contrasts with OSWER document 9442.1994(06), dated July 22, 1994, where EPA determined that, 15-pound natural gas flow regulators consisting mainly of metal were not allowed to qualify as scrap metal because of the two ounces of liquid mercury present. ("In general, any quantity of liquid mercury other than trace amounts attached to or contained in a spent material precludes that material from being a scrap metal.") Please clarify when a material consisting primarily of metal, but which contains some non-metal components such as mercury, qualifies as scrap metal. On page 2362, paragraph 7 suggests that the variance provision of 260.31 (c)(3) (the degree to which the reclaimed material is like an analogous raw material") is not when a partially reclaimed material is similar in concentration to intermediates produced from virgin ores, etc. EPA should make it clear that 260.31 (c)(3) is met by having the candidate material of the same concentration as an early raw intermediate. In the case of scrap metal, the "analogous raw materials" are manufactured metal products. Comparison should be made to metal products with regard to quality. According to our understanding of the preamble discussion of the January 4, 1985 Federal Register (page 655) the measure of whether condition 260.31 (c)(3) applies is not the degree to which the candidate material is like

an equivalent virgin finished product. It is not met when the candidate material simply has the same concentration as virgin

product-like or commodity-like the candidate material is. Therefore, the reference to a reclaimed material being like an

situation where the "raw material" is itself a product.

RESPONSE:

The commenter has raised several different issues that require response: the status of any residues generated by the processing of scrap metal; a request for clarification that a material that

definition of scrap metal; and a request for clarification that 40 CFR §260.31(c)(3), which sets the

when the candidate material is of the same concentration as an early raw intermediate.

recycling and second, whether or not materials that are primarily metal, but have some non-metal

definition of scrap metal. Therefore, the determination as to whether a waste meets the definition

scrap metal, a secondary material from smelting and refining operations (e.g., slags, drosses, and

liquid mercury), and metal-containing wastes with a significant liquid component (e.g., spent lead

processed scrap metal. If, at the point of generation, a secondary material has enough hazardous

scrap metal. For example, if a tank is being decommissioned, and it has some hazardous residue

the residues constitute a significant liquid component. In order to meet the definition of

distinct components that are separated from a scrap metal that would not otherwise meet the

separated material would be a newly generated waste and therefore subject to a hazardous waste

handled as hazardous waste.

The commenter also asks about the applicability of one of the factors at 40 CFR

partially-reclaimed material variance. The Agency evaluates available information and data

partially-reclaimed materials are "commodity-like" and not part of the waste management

initially-reclaimed material is like an analogous raw material. This factor examines if a material can

substitue for a virgin material in a process. The Agency notes that in the context of today's rulemaking, these factors were used to evaluate whether excluded scrap metal being recycled is "commodity-like" rather than part of the waste management problem. This evaluation was not intended to determine whether this material should be granted a partially-reclaimed variance under 40 CFR §260.31(c)(3). The Agency did not rely on a single factor in it's analysis for the excluded scrap metal exclusion, but based this decision on available data and information on all of the five factors. Discussion of the criteria found at 40 CFR §260.31(c)(3) as it is used in evaluating materials for a partially-reclaimed material variance is beyond the scope of this rulemaking.

EPA further notes for the commenter that the Agency will be addressing broader issues and clarifications related to the definition of solid waste in a future rulemaking. Modifying the Agency’s current interpretation of the definition of solid waste is beyond the scope of this rulemaking and is more appropriately addressed in the context of the Definition of Solid Waste rulemaking, which will be proposed in the near future.

DCN PH4A011
COMMENTER NY State Dept. of Environ
RESPONDER RE
SUBJECT SCRP
SUBJNUM 011
COMMENT EPA proposes to exclude from RCRA jurisdiction Shredded Circuit Boards destined for metal recovery that are managed in containers during storage and shipment prior to recovery. Currently, whole circuit boards are recognized as "scrap metal," which is currently exempt from regulation. According to EPA the purpose of this proposed exclusion is to facilitate recovery of this material. The Department finds EPA's reasoning difficult to follow, particularly when EPA suggests that shredded circuit boards may not qualify as "scrap metal." Shredding does not enrich or deplete the material with respect to metal content. Since shredding does not involve separation of non-metal components, SCBs have as much "scrap metal" after shredding as before. As scrap metal, shredded circuit boards would be exempt from regulation and this would facilitate recovery of this material as well as a jurisdictional exclusion. Perhaps the issue can be resolved by reexamining the reasoning used originally to designate printed circuit boards as scrap metal in the 1992 memorandum. This memorandum, believed to be OSWER number 9441-1992(27), dated August 26, 1992, states that "...scrap metal is defined based in large part on the physical appearance of a secondary material...." That same memorandum allowed circuit boards destined for metals reclamation to be burned. For shredded circuit boards that do not qualify as scrap metal, would the proposed regulatory exclusion of 261.4 (a)(14) allow the burning of these shredded boards prior to metal reclamation/recycling/recovery? Or, since burning in incinerators is "... never an exempt type of recycling ... " (OSWER document 9489, 1994(02), dated September 19, 1994), are these shredded boards forbidden from being considered destined for reclamation/recovery if they are burned first? Also, please clarify how the Sept 19, 1994 document's seemingly unqualified rejection of burning as a preliminary recycling step can be reconciled with the August 26, 1992 document's allowance of burning as a preliminary recycling step. It is more difficult to understand why a jurisdictional exclusion is proposed for SCB and why it is conditioned upon management in containers. EPA has never before conditioned a jurisdictional exclusion on the type of storage units employed, except where it was necessary to rule

out the use of land-based units that might provide an element of discard. We do not see why SCB are "more like articles in commerce" than whole circuit boards, when further processing is still required to separate out the non-metal components. Moreover, by requiring management in containers in order to utilize the jurisdictional exclusion, shipments of SCB in bulk would then, presumably, be fully regulated (i.e., it not excluded or considered to be "scrap metal"), unless managed in large containers, such as roll-offs. If anything, this proposal could establish a barrier to the recycling of printed circuit boards removing all regulatory exceptions and not allowing the jurisdictional exclusion for bulk shipments of SCB. It would be better for EPA to remain silent on this issue or to affirm that SCB would still be regarded as "scrap metal" and exempt from regulation. If circuit boards were processed to separate out non metal components, then, at that point, the enriched material could properly be excluded from RCRA jurisdiction, consistent with the proposed exclusion for processed scrap metal.

RESPONSE:

The commenter raises three issues: a request for clarification of why whole circuit boards also are not excluded from the definition of solid waste; clarification of two policy directives that appear to contradict each other concerning burning as a recycling step; and clarification of why containers are required to meet the shredded circuit board exclusion.

The commenter first discusses the issue of extending the proposed exclusion to whole circuit boards. The commenter argues that since the content of the boards is no different before or after shredding, there should be no difference in their regulatory status. The Agency disagrees. Whole used circuit boards are less commodity-like than shredded circuit boards. Whole used boards, compared to shredded circuit boards, are harder to assay, more difficult to handle and may contain proprietary information of generators and manufacturers. EPA also notes that since 1992, used whole boards are currently classified as scrap metal and therefore when recycled are completely excluded from RCRA regulatory requirements. Therefore, no RCRA regulatory requirements such as manifesting, export or storage permit requirements currently operate as disincentives to environmentally sound recycling of these materials. The exclusion from RCRA jurisdiction for used shredded circuit boards is necessary because they do not qualify for the definition of scrap metal and thus may be subject to RCRA regulatory requirements that may serve as disincentives to their recovery. EPA also believes that because whole used circuit boards are classified as scrap metal, that excluding whole used boards from the definition of solid waste is not necessary to ensure environmentally sound recovery of these materials and would be confusing to the Agency’s current definition of scrap metal.

The commenter also requested clarification of how to reconcile a 1994 policy letter stating that the regulatory exclusion for certain recyclable materials (e.g., precious metal-bearing

recyclable materials are not exempt from incineration requirements) with a 1992 memorandum on circuit boards that identifies burning as a possible preliminary step in recycling of whole circuit boards. First, the commenter's request is outside the scope of the final rule. The policy the commenter is discussing pertains to an Agency memorandum on whole circuit boards rather than shredded circuit boards. Second, the commenter is incorrect in assuming an apparent conflict exists between these two Agency statements. The commenter assumes that all burning of secondary materials must occur in incinerators instead of other thermal devices such as boilers, industrial furnaces and miscellaneous thermal treatment units. The recycling exclusion of 40 CFR 261.6(a)(2) only pertains to shredded circuit boards with economically recoverable amounts of precious metals. In 1993, EPA clarified that precious metal-bearing hazardous wastes, when legitimately recovered in thermal recovery units, are not subject to 40 CFR Part 264, Subpart O requirements (Simon to Shapiro; December 27, 1993 memorandum). The September 1994 letter does not disturb this policy and describes the status of the thermal unit as an incinerator rather than a boiler or industrial furnace.

Lastly, the commenter requests a clarification of why containers are required to meet the shredded circuit board exclusion. The process of shredding the boards produces small fines from the whole board which are dispersible and do not meet the RCRA regulatory definition of scrap metal. However, the Agency has concluded that the application of RCRA regulatory provisions to shredded boards may present serious disincentives to their recovery. EPA proposed to exclude shredded circuit boards being reclaimed from the definition of solid waste to facilitate their recovery. In addition, the Agency determined that shredded circuit boards satisfy the five factors for evaluating whether a material is "commodity-like," and therefore not a part of the waste management problem. Containerization of the shredded circuit boards, along with the value of the material, serve to minimize loss. Note that containerization in and of itself was not the only reason the Agency concluded that shredded circuit boards should be excluded from the definition of solid waste. The other five factors supported this determination as well.

DCN PH4A015
COMMENTER General Motors Corporation
RESPONDER RE
SUBJECT SCRP
SUBJNUM 015
COMMENT Processed Scrap [61 FR 2361, 40 CFR 261.1 (c)(9)] The preamble discussion and the proposed definition of processed scrap does not at all recognize the handling methods that may be in use at a particular generator site. The proposed definition of processed scrap metal is scrap metal which has been manually or mechanically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes, but is not limited to scrap metal which has been bailed ... This definition is adequate for its intended purpose; however, an inspector using a narrow interpretation definition could cause difficulties to arise at facilities that generate scrap metal. Scrap metal in route from its "point of generation" to the area of the facility where bailing, shredding, melting, etc., occurs could be called a solid waste. General Motors does not believe, especially in light of this preamble discussion and proposed rulemaking that the Agency intends for scrap metal in process at a manufacturing facility to be subject to solid waste regulations. General Motors suggest that the definition of "processed scrap metal" be modified to include an addition such as the one utilized in the text below. Processed scrap metal is scrap metal which has been or will be processed on-site such that it will be manually or mechanically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes but is not limited to scrap metal which has been bailed ...

RESPONSE:

Under the final rule's exclusion for excluded scrap metal, if the scrap metal is not home or prompt scrap, the exclusion will not take effect at facilities until scrap metal has undergone a processing step. Therefore, there will be a certain period of time from the point that the scrap metal is generated to the first processing step that scrap metal will be exempt from the hazardous waste definition, but not excluded from the definition of solid waste (40 CFR §261.6(a)(3)(ii)). The commenter seems to be requesting that the exclusion from the definition of solid waste be extended to unprocessed scrap metal if the processing will occur on-site. The Agency has shown that there are some types of unprocessed scrap metal (home and prompt) which are sufficiently commodity-like that they will be handled properly. However, other types of unprocessed scrap

metal are not similar to analogous raw metal concentrates and intermediates, and therefore were not granted an exclusion from the definition of solid waste. In today's final rule, the Agency has

punchings, and borings generated by steel mills, foundries, and refineries) and prompt scrap metal (e.g., turnings, cuttings, punchings, and borings generated by the metal working/fabrication

situations where the time between the point of generation and the first processing step could be as little as a few minutes, there could also be situations where unprocessed scrap metal is stored on-

sufficiently commodity-like that it will be handled as carefully as a raw material.

DCN PH4A016
COMMENTER Public Service Electric &
RESPONDER RE
SUBJECT SCRP
SUBJNUM 016
COMMENT PSE&G supports EPA's proposal to exclude scrap metal and shredded circuit boards managed in containers from the definition of solid waste. (61 Fed. Reg. 2361-63) PSE&G, which is actively involved in resource recovery operations views this proposal as very much a progressive step in the right direction towards promoting recycling of these products. As EPA has recognized, the designation of recyclable materials as solid wastes stigmatizes the material and creates a significant deterrent to its beneficial reuse. (id. at 2363) While this initiative is well-intended, PSE&G is concerned that such rulemaking, on a case-by-case basis, through individual proposed rulemaking and comment is inefficient. We also believe that such regulatory development leads to confusion by promoting differing regulatory positions for different materials that are inherently similar in their marketability and value. PSE&G, like many other companies, generates recyclable materials that are marketable and considered valued commodities, rather than solid wastes. These materials are inherently more commodity-like than waste-like. Because of this distinction, PSE&G believes a more productive approach would be for EPA to establish criteria that may be used to distinguish between solid waste and commodity-like designations. This approach would be consistent with that used by the regulated community under the RCRA program, where the generator determines whether a solid waste is a hazardous waste (40 C.F.R. 262.11) PSE&G encourages the Agency to move forward in a comprehensive proposal to amend the definition of solid waste to encourage recycling and reduce the generation of solid wastes.

RESPONSE:

The commenter appears to be taking the position that promulgating exclusions for recyclable materials one by one is inefficient because there are many wastes that could be considered to be commodity-like, and therefore should be excluded from the definition of solid waste. The commenter's request is beyond the scope of this rulemaking and is better addressed in the Definition of Solid Waste rulemaking, due to be proposed in the near future.

DCN PH4A017
COMMENTER Chemical Waste Management

SUBJECT SCRP
SUBJNUM 017

Solid Waste (61 Fed. Reg. at 2361) The Agency is proposing to amend the definition of solid waste by excluding processed scrap

restricted to scrap metal which has been processed by scrap metal recyclers to be traded on recycling markets for further

processing of scrap metal to include: 1) manual or mechanical separation of scrap metal either into specific scrap categories

and 2) unit operations such as sintering and melting operations which melt or agglomerate materials such as drosses and fines

solid waste.

RESPONSE:

definition of solid waste for excluded scrap metal. In today's final rule, the Agency has expanded the scope of the exclusion to include home scrap metal (e.g., turnings, cuttings, punchings, and

cuttings, punchings, and borings generated by the metal working/fabrication industries). The Agency notes

recycled applies to scrap metal that has under gone a processing step (as defined in the preamble to the proposed rule) regardless of who does the processing. In other words, a processing step

or a scrap recycler. Once the scrap metal has undergone a processing step, it may qualify for the exclusion from the definition of solid waste.

COMMENTER Chemical Waste Management
RESPONDER RE

SUBJNUM 017
COMMENT Exclusion of Shredded Circuit Boards From the

proposing to exclude shredded circuit boards destined for metal recovery that are managed in containers during storage and

CWM supports this proposal. CWM believes that shredded circuit boards should be excluded from the definition of solid waste in

the Agency should clarify the regulatory status of sweeps/ash, fluff, and baghouse dust associated with the shredding of

Lowrance, to Region Waste Management Division Directors (See Attachment 1), that discusses the regulatory status of printed

boards are no longer similar to the materials that meet the definition of scrap metal. As a result, the sweeps/ash, fluff,

Agency is proposing to change this position CWM believes that it is appropriate for the Agency to also address sweeps, fluff, and

these items from the definition of solid wastes when they are destined for metal recovery.

The Agency would like to thank the commenter for supporting the exclusion from solid

regulatory status of secondary materials associated with the shredding of spent printed circuit boards, including sweeps/ash, and baghouse dust.

precious metal-bearing secondary material (often ash that is crushed into particulate form in a ball mill or similar device) or particulate material that is collected from firms handling precious metals

circuit boards are sent for assaying and reclamation, have been previously classified by EPA as a by-product (Lowrance to Waste Management Division Directors US EPA, Regions I-X; August

hazardous solely by exhibiting a characteristic. Characteristic by-products are not solid wastes

when reclaimed (40 CFR §261.2(c)(3)). In contrast, when sweeps are derived from source material that meets the description of a listed hazardous waste, the sweeps are solid wastes that are also hazardous wastes and are regulated under the appropriate RCRA regulation provisions (40 CFR §261.2(c)(3)).

EPA has classified baghouse dust from precious metal recovery furnaces as a sludge (Lowrance to Waste Management Division Directors US EPA, Regions I-X; August 26, 1992). As with the by-product classification for sweeps, baghouse dust is not a solid and hazardous waste when reclaimed, when considered hazardous solely by exhibiting a characteristic. However, if the source material to the furnace contained a listed hazardous waste, then the baghouse dust would be considered a solid and hazardous waste due to its classification as a listed sludge being reclaimed. Also as with the sweeps, even if the baghouse dust is a listed sludge, it may still be exempt from the definition of hazardous waste under 40 CFR Part 266, Subpart F if it contains economically recoverable levels of precious metals.

The commenter's request to establish a global exclusion from the definition of solid waste for materials such as sweeps/ash, fluff, and baghouse dust is beyond the scope of this rulemaking. The Agency asserts that no change to the current regulatory framework is necessary for these materials, given current regulatory interpretations.

DCN PH4A019
COMMENTER Westinghouse Electric Cor
RESPONDER RE
SUBJECT SCRP
SUBJNUM 019
COMMENT Westinghouse supports EPA's proposal to exclude scrap metal and shredded circuit boards from the definition of solid waste. We concur with the rationale presented by EPA in the preamble and believe these actions would not adversely impact human health or the environment.

RESPONSE:

The Agency thanks the commenter for supporting the exclusion from the definition of solid waste for shredded circuit boards.

DCN PH4A021
COMMENTER Association of Container
RESPONDER RE
SUBJECT SCRP
SUBJNUM 021
COMMENT The Association of Container Reconditioners (ACR) hereby comments on the proposed Exclusion of Processed Scrap Metal and shredded Circuit Boards from the definition of Solid Waste, which appeared in the January 25, 1996 Federal Register. Our members are businesses engaged in the cleaning and restoration of packaging materials, primarily 55-gallon steel drums. Each year, more than 40 million steel drums are reconditioned for reuse in the U.S. Since source reduction including reuse is an EPA priority, ACR believes the proposed rule must be revised to encourage U.S. businesses to recondition and reuse containers where practicable, instead of prematurely scrapping used containers. 7.0 Definition of Processor ACR believes EPA has not adequately defined the term "processing." As published, processed scrap metal is metal that "has been separated, melted, or otherwise processed to add value or improve handling qualities." EPA proposes to exclude processed scrap metal from the definition of solid waste because it is a secondary material that is "commodity-like." Processed scrap metal is "commodity-like" if it has an "inherent positive economic value," and can be sold into an established market. Since there is no definition of the term "processing" in the proposal, any action that "adds value" to scrap metal, e.g., segregation of like items, constitutes "processing." Thus, virtually any facility handling metals in any form could be a scrap metal processor. It is a given that at some point during the collection and processing stages, scrap metal becomes secondary material and assumes commodity-like characteristics, but this stage is not defined by the EPA. In fact, the Agency's own research shows that processing is required before scrap metal could be considered commodity-like. Therefore, ACR believes that EPA must determine (a) at what point in the metal recycling continuum does scrap processing begin, and (b) what amount or type of processing is necessary before scrap metal becomes commodity-like and falls out of the definition of solid waste.

RESPONSE:

A material that meets the definition of scrap metal is excluded from the definition of solid waste when it also meets the definition of excluded scrap metal. If the scrap metal does not fall within the definition of one of the categories of excluded unprocessed scrap metal (home or prompt scrap), then the material must meet the definition of processed scrap metal to be excluded from the definition of solid waste. In response to information provided by commenters, the Agency has identified chopping, crushing, flattening, cutting and sorting as processes typically used in the processing of scrap metal for recycling that were omitted from the proposed definition. The Agency has added these processes to the definition of processed scrap metal in today's final rule which reads: "scrap metal which has been manually or physically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes but is not limited to scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type (i.e., sorted), and, fines, drosses and related materials which have been agglomerated." The Agency clarifies that the exclusion for excluded scrap metal being recycled applies to scrap metal that has undergone a processing step regardless of who does the processing. In other words, a processing step may be performed by the generator, an intermediate scrap handler (e.g., broker, scrap processor), or a scrap recycler. Once the scrap metal has undergone a processing step, it may qualify for the exclusion.

DCN PH4A021
COMMENTER Association of Container
RESPONDER RE
SUBJECT SCRP
SUBJNUM 021
COMMENT ACR believes EPA should structure a category of "reusable metal materials that can be reused for their original intended purpose. Such items should not be defined as scrap until they have met separate and specific management criteria. For example, a RCRA-empty container between 30 and 3,000 liters that previously contained hazardous substances must be cleaned and mechanically altered (i.e., crushed or. shredded) in order to be defined as processed scrap metal. After mechanical alteration, such scrap metal should meet at least the following requirements to be defined as processed scrap metal: (1) the Institute of Scrap Recycling Industries (ISRI) definition of cleanness for ferrous scrap be referenced by EPA. ISRI's definition states: "All grades shall be free of dirt, nonferrous metals, or foreign material of any kind". However, these terms are not intended to preclude the accidental inclusion of negligible amounts where it can be shown that this amount is unavoidable in the customary preparation and handling of the particular grade; and (2) a steel container must be mechanically processed so as to meet one of ISRI's ferrous scrap codes, such as code number 211 shredded scrap. These definitions and standards are referenced in ISRI, Scrap Specifications Circular 1994, 1325 G Street, N.W., Washington, D.C. 20005. Consistent with ISRI's cleanness definition, ACR and ISRI have an agreement that affirms containers are to be cleaned prior to being sent to a scrap yard. Currently, under the Department of Transportation (DOT) regulations, an unclean RCRA-empty container is handled analogously to a full container. The empty container must have all closures in place and all labeling as to original contents and associated hazards. Any unclean crushed containers would be required to be containerized and labeled. Cleaning prior to crushing ensures DOT compliance. Under normal circumstances, steel drums can be reused 5 - 10 times. By clarifying the definition of processing or differentiating "reusable metal materials" from other scrap metal, EPA would encourage industry to reuse prior to recycling, which is consistent with EPA's Hierarchy of Integrated Waste Management. (EPA, Decision-Makers Guide to Solid Waste Management, EPA/530-SW-89-072) A reconditioner operates in a manner consistent with the hierarchy

by cleaning and scrapping only those that are unfit for reuse. We appreciate this opportunity to comment on the proposed changes in regards to processed scrap metal.

RESPONSE:

In the final rule, the Agency did not create a separate category for reusable metal materials that can be used for their original intended purpose. Although the commenter suggests that establishing a separate category would be an incentive for the reconditioning and reuse of 55-gallon steel drums and other like containers, the Agency does not believe that the regulation as proposed is a disincentive for such activity. Currently, drum reconditioning is a form of recycling activity and is exempt under 40 CFR §261.2(c) provided it meets conditions at 40 CFR part 261.7 for empty containers. Therefore, drums being reconditioned are not affected by today's rule. Such drums are generally fabricated from materials such as carbon steel which do not contain hazardous constituents and would likely not be classified as hazardous. The Agency believes that the proposed regulation does not serve as a disincentive to reuse and therefore, a separate category for reusable metal materials is not being established in today's final rulemaking.

DCN PH4A032
COMMENTER Eastman Kodak Company
RESPONDER RE
SUBJECT SCRP
SUBJNUM 032
COMMENT We would like to take this opportunity to provide our strong support for the exclusions to the RCRA definition of solid waste being proposed for processed scrap metal and shredded circuit boards which are incorporated within the proposed rule on mineral and mining processing wastes.

RESPONSE:

The Agency thanks the commenter for supporting both exclusions from the definition of solid waste for excluded scrap metal and shredded circuit boards.

DCN PH4A032
COMMENTER Eastman Kodak Company
RESPONDER KM
SUBJECT SCRP
SUBJNUM 032
COMMENT Adopt the Proposed Exclusion for Processed Scrap Metal

Kodak agrees with the Agency that processed scrap metal should not be captured by the RCRA definition of solid waste when it is destined for recycling. Many companies, including Kodak, separate scrap metal into categories in order to enhance its value in the marketplace. This material has truly become a commodity in the world market, sought by many who operate metal recycling facilities. Once these materials have been separated into metal types (e.g., iron and steel; aluminum; copper and brass) they are managed to reflect the real value which they represent. Clearly this material is not part of the "waste disposal problem," and should not be subject to RCRA regulation. Even though currently there are minimal requirements in the RCRA regulations for scrap metal, it is stigmatized by being considered a solid (and potentially hazardous) waste. By providing the proposed exclusion to the definition of solid waste the Agency can help remove this impediment to the recycling of these materials. This is not only important in the present manufacturing climate, but will become increasingly important in the years ahead as companies become more involved in the de-manufacturing of end-of-life equipment.

RESPONSE:

EPA thanks the commenter for supporting the proposed exclusions from the definition of solid waste for scrap metal.

DCN PH4A032
COMMENTER Eastman Kodak Company
RESPONDER KM
SUBJECT SCRP
SUBJNUM 032
COMMENT Adopt the Proposed Exclusion for Shredded Circuit Boards

Kodak also agrees with the Agency that shredded circuit boards should not be defined as a solid waste when intended for metals recovery. Typically their precious metal content gives these materials a real value, making them a commodity in the marketplace. Shredding them is a practical technique used to destroy any proprietary information they may contain, as well as reducing the total volume to be stored and shipped. Using this technique should not penalize the generator of these materials by making them ineligible for the current interpretation as being scrap metal. The condition of environmentally protective container storage, which is to be applied to the exclusion seems to be a reasonable one. In Kodak's experience, shredded circuit boards are commonly stored and transported in containers. Since these containers are intended to keep their valuable contents inside, they will also serve to protect the environment from spills. We must commend the Agency for presenting this requirement as a performance standard, rather than establishing detailed prescriptive requirements (e.g., size, porosity, structural integrity) for the containers. This is refreshing and hopefully reflects a small hint of the future direction of other environmental regulations. Removing regulatory uncertainties and allowing shredded circuit boards to move freely in the stream of commerce will do much to enhance their recycling rate. This is not only important in the U.S. but it also sets a precedent for the rest of the world. When this material is being recycled it is clearly not being "discarded", and therefore is not part of the "waste disposal problem".

RESPONSE:

EPA thanks the commenter for supporting the shredded circuit board exclusion from the definition of solid waste.

DCN PH4A032
COMMENTER Eastman Kodak Company
RESPONDER KM
SUBJECT SCRP
SUBJNUM 032
COMMENT Move Toward a More Generic

Definition of Solid Waste. While Kodak believes that the exclusions being proposed in this rulemaking are the right thing to do at the present time, we urge the Agency to take a broader look at the issue of commodities being recycled. Just as the two materials which are the subject of this rulemaking do not deserve to be considered solid wastes, there are many other secondary materials being put to equally environmentally friendly uses which should not be subject to RCRA regulation. Rather than continue to study materials one or two at a time and propose specific exclusions, the Agency should concentrate its efforts on establishing a more generic regulatory construct which excludes secondary materials which are recycled back into bonafide manufacturing processes. A definition of "manufacturing process" could be established to guide generators and regulatory agencies in determining what recycling operations are outside the jurisdiction of RCRA. If necessary, a limited number of criteria which are indicia of discard could be used to provide limitations for the definition. This approach could allow many of the present exclusions to be eliminated. The end result would be to simplify the RCRA regulations and to remove many of the current disincentives to recycling.

RESPONSE:

The commenter's request, that EPA establish a more generic regulatory construct which excludes secondary materials that are recycled back into manufacturing processes, is beyond the scope of this rulemaking. The Agency will be addressing broader issues and clarifications related to the definition of solid waste in a future rulemaking. Modifying the Agency's current interpretation of the definition of solid waste is more appropriately addressed in the context of the Definition of Solid Waste rulemaking, which will be proposed in the near future.

DCN PH4A033
COMMENTER International Precious Metals Institute
RESPONDER RE
SUBJECT SCRP
SUBJNUM 033
COMMENT Scrap printed circuit boards contain a substantial amount of recoverable precious metals (i.e., gold, silver) and non-precious metals (i.e., copper), that render them a valuable commodity and feedstock to the precious metal refining industry. Scrap printed circuit boards are shredded for a number of important reasons, all of which have been accurately portrayed by the agency in the proposed rule. The shredding of printed circuit boards also has long been a standard practice in the industry and has not resulted in an environmental incident. IPMI agrees with the agency that shredded printed circuit boards must be properly containerized prior to refining, not only for environmental protection but because of the high value as well. IPMI also agrees with the Agency that such material should be excluded from RCRA jurisdiction.

RESPONSE:

The Agency thanks the commenter for supporting the exclusion from the definition of solid waste for shredded circuit boards.

DCN PH4A034
COMMENTER Institute of Scrap Recyclers
RESPONDER RE
SUBJECT SCRP
SUBJNUM 034
COMMENT ISRI supports efforts by the Agency to amend the definition of solid waste by excluding from its definition "commodity-like" materials, such as scrap metal. Following are ISRI's comments in response to issues raised by the Agency in the above referenced Proposed Rulemaking. ISRI enthusiastically supports EPA's efforts at recognizing the “commodity-like” nature of scrap metal. Scrap metal which has been diverted or removed from the waste stream for recycling is a commodity that is analogous in value, physical state, and environmental benefits - if not better in terms of environmental benefits- to any other product or raw material. Scrap processors purchase scrap metal so as to reclaim the metal components, and then sell the recovered metal to mills, foundries, alloy manufacturers, ingot makers, and other consumers for use in making new metal bearing products, such as automobiles, appliances, and other consumer products. The metal recovered by the scrap processing industry is a product sold in the open market in competition with virgin raw materials. Scrap processors have no motivation to dispose of such a valuable and useful product, and in fact, their activities preclude the disposal of these products. EPA's basis for excluding processed scrap metal being recycled from regulation as solid waste is that it is sufficiently 'commodity-like.'" The Agency further discusses five factors which it utilizes in evaluating the commodity-like nature of processed scrap metal, or any other material being considered for exclusion from the definition of solid waste. Using these five factors, ISRI would like to add the following points to further support the Agency's determination of the commodity-like nature of processed scrap metal: 1. "The degree of processing the material has undergone and the degree of further processing that is required." All shipments of processed scrap metal meet strict specifications. Industry specifications exist for approximately 250 different grades of nonferrous and ferrous scrap metal. Shipments are rejected if the specifications are not met. 2. "The value of the material after it has been reclaimed." As acknowledged by EPA, scrap metal is traded both nationally and internationally in established markets for positive economic value. As evidence of its value, prices for

many scrap commodities are generally published in the daily American Metal Market and weekly Metals Week. European and world price evaluations are published weekly in Metal Bulletin (London). Reported prices for specific transactions in the Asian market are published in the TEX Report (Tokyo). Other publications provide additional pricing data. 3. "The degree to which the reclaimed material is like an analogous raw material." Scrap metal is used in lieu of virgin metal because of its comparable (and in some cases preferable) performance to virgin metal, while providing a substantial cost savings for the manufacturer reflecting the market price and the environmental benefits of scrap. Steel made from scrap is chemically and metallurgically equivalent to steel manufactured from virgin ore. In fact, most metals and alloys produced in the United States are made using secondary materials. Any weighing of the environmental costs and benefits of virgin versus scrap metal use as raw materials should also take into account the avoided environmental damages associated with mining and beneficiation of virgin metal. In some industries, the use of scrap lowers emissions and waste generation. 4. "The extent to which an end market for the reclaimed material is guaranteed." End markets for scrap metals include steel mills, foundries, die casters, mills, fabricators, and manufacturers. Due to the fact that the capital and operating costs of using scrap metal are generally lower than those costs involved with using virgin ores and that there are no chemical or physical differences between the respective outputs, it is likely that the importance of scrap as a raw material will only grow by the future, thus ensuring the availability of end markets. There is virtually unanimous agreement that demand for scrap metal is, and will continue, on an upward trend. 5. "The extent to which a material is managed to minimize loss." The scrap processing industry is committed toward responsible and environmentally safe operating procedures and practices. According to an EPA sponsored report on the environmental risks associated with scrap metal recycling, "very few, if any, instances of environmental or human health damages can be directly attributed to scrap metal mismanagement during scrap metal recycling." In fact, environmental management practices in the scrap processing industry are increasing. According to EPA: "given increasingly stringent controls on recycling facilities, requiring containment buildings and runoff control, increased use of engineering controls to capture dusts, and increased hygiene awareness at

the job site, the potential for contamination and worker exposure appears to have dramatically decreased over the past decade." 7. As acknowledged by EPA in the study quoted above: "scrap yards historically accepted a vast array of materials which resulted in contamination not directly associated with the metal . Over the past decade, at the urging of the Institute of Scrap Recycling Industries, shredder operators have begun to refuse any scrap containing batteries, gas tanks, tires, and other items to reduce contamination from lead, PCBS, CFCs, and other hazardous substances. 8 In fact, several years ago ISRI issued an Environmental Operating Guidelines manual providing site management practices designed to minimize potential adverse environmental effects for all the types of equipment and processes typically employed at a scrap processing facility. Source control programs are now common throughout the scrap processing industry. 9 In addition, the NPDES storm water permit program has resulted in the issuance of permits requiring scrap processing facilities throughout the country to develop pollution prevention plans containing Best Management Practices addressing good housekeeping, preventive maintenance, spill control and response, employee training, runoff management, erosion control, and other control measures. 10. By recognizing that scrap metal is a commodity-like material and not solid waste, the Agency is removing a significant deterrent to the increased recycling of scrap metal. The proposed exclusion will minimize the regulatory burden currently associated with scrap metal and provide added economic and other incentives to recycle the material, thus benefiting the environment, industry, and the nation as a whole. One example of the way the current inclusion of scrap metal in the definition of solid waste acts as a possible deterrent to its recycling is in the international trade of scrap metal. In September of 1995, Parties to the Basel Convention agreed to amend the Convention to include a ban on the movement of hazardous waste recyclables from developed countries to developing countries, effective January 1, 1998. To date, few countries have ratified the amendment and instead are awaiting guidance from the Convention's Technical Working Group on what recyclables are covered or excluded by the ban. Significant trade in scrap metal and other secondary materials currently exists and the amendment to the Basel Convention could represent a significant non-tariff trade barrier to its continuing trade. The Clinton Administration has been very vocal in its support of the fact that scrap metal should be excluded

> from the jurisdiction of the Basel Convention. The exclusion of scrap metal from the U.S. definition of solid waste as expressed in RCRA, would bring the U.S. domestic regulatory situation in line with the position that the State Department, the Department of Commerce, and EPA have taken internationally.

RESPONSE:

The Agency thanks the commenter for supporting the exclusion from the definition of solid waste for processed scrap metal.

DCN PH4A034
COMMENTER Institute of Scrap Recyclers
RESPONDER RE
SUBJECT SCRP
SUBJNUM 034
COMMENT EPA SHOULD MODIFY ITS PROPOSAL SO THAT ALL SCRAP METAL DIVERTED OR REMOVED FROM THE SOLID WASTE STREAM AND DESTINED FOR RECYCLING IS EXCLUDED FROM THE DEFINITION OF SOLID WASTE. EPA should not distinguish between processed and unprocessed scrap metal in promulgating the solid waste exclusion for scrap metal that is to be recycled. The five factors that EPA utilizes to evaluate the commodity-like nature of processed scrap metal apply to unprocessed scrap metal that has been diverted or removed from the solid waste stream for the purpose of being recycled. Scrap metal diverted or removed from the solid waste stream also has economic value and end markets and is just as analogous to raw material as processed scrap metal. In addition, as with processed scrap metal, the physical state of scrap metal diverted or removed from the solid waste stream limits the dispersion of metal constituents during handling and for processing. According to a recent EPA report: "Bureau of Mines commodity experts and other experts contacted by SAIC agree that scrap metal itself should not pose an environmental concern, even if the scrap is stored exposed to the elements during storage. In fact, many of the metals are either corrosion-resistant or will oxidize, binding potential contaminants in the metal." The artificial distinction created by EPA between processed and unprocessed scrap metal also creates unnecessary confusion for individual facility operators. It will be extremely difficult in many instances for a particular facility operator to differentiate between processed and unprocessed scrap metal for the purposes of regulatory jurisdiction due to their similar - and in some cases identical - nature. ISRI recognizes that in order for the regulations to work, both the regulated community and the regulators need to know at what point scrap metal exits RCRA Subtitle C jurisdiction. ISRI recommends that point not be when processing occurs, but instead when the scrap metal is diverted or removed from the solid waste stream for the purpose of recycling. Thus, proposed Section 261.4(a)(113) would read as follows: 261.4 Exclusions. (a) * * * (13) Processed scrap metal diverted or removed from the solid waste stream for the purpose of recycling being reclaimed. By specifying that scrap metal is no longer a

solid waste when diverted or removed from the solid waste stream for recycling, the exclusion will fully capture all scrap metals meeting the "commodity-like" criteria specified by EPA. In addition, as the following examples make clear, such a criteria can be easily followed by both industry and EPA: Example #1: Industrial Cuttings and Turnings. Industrial cuttings and turnings are a very common form of scrap metal generated by the metal working/fabrication industries. Turnings and cuttings are often generated in such a way that processing is unnecessary prior to shipment to the consumer. Thus, the turnings and cuttings might never meet EPA's proposed exclusion for processed scrap even though they are definitely "commodity-like" (i.e., they have high intrinsic value, are in demand in many end markets, and pose little environmental risk). Under ISRI's proposed exclusion, the turnings and cuttings would be excluded from the definition of solid waste at the point the generator decides that the material will be sent for recycling. Example #2: Automobiles and White Goods. What about, an automobile, or appliance, found abandoned along the roadside? In such a case, the materials have not been diverted from the solid waste stream for the purpose of recycling and thus would not qualify for the proposed exclusion. If the city picks them up and delivers them to a landfill for disposal, the same result would occur. However, what if the landfill decides to sell the automobile to a scrap processor for recycling, or if the city makes the same decision? The automobile is no longer a solid waste and exits RCRA jurisdiction at the point where a party takes an active step to put the material in question into a stream of commerce which leads to its recycling. Example #3: Demolition Scrap. There are some situations in which scrap metal destined for recycling may be generated in a form such that it is mixed with waste destined for disposal. Such may be the case during demolition projects. In such a situation, the scrap metal would exit Subtitle C jurisdiction at the point at which the scrap metal is removed from the solid waste and sent for recycling. This often occurs at the demolition site. As the above examples illustrate, creating an exit from RCRA jurisdiction for scrap metal based not on whether it has been processed, but on when it has been diverted or removed from the solid waste stream would not be difficult to manage and would be more consistent with EPA's desire to exclude from the definition of solid waste "commodity-like" materials.

RESPONSE:

In response to information provided by commenters, EPA identified and studied three different types of unprocessed scrap metal to determine whether the scope of the exclusion should be expanded: home scrap metal, prompt scrap metal and obsolete scrap metal. Home scrap is scrap metal generated by steel mill, foundries, and refineries such as turnings, cuttings, punchings, and borings. Prompt scrap, also known as industrial or new scrap metal, is generated by the metal working/fabrication industries and includes such scrap metal as turnings, cuttings, punchings, and borings. Obsolete scrap metal is composed of worn out metal or a metal product that has outlived it original use, such as automobile hulks, railroad cars, aluminum beverage cans, steel beams from torn down buildings, and household appliances.

The Agency evaluated five factors to determine if it is appropriate to exclude the waste from RCRA Subtitle C jurisdiction. The five factors are: 1) the degree of processing the material has undergone and the degree of further processing that is required, 2) the value of the material after it has been reclaimed, 3) the degree to which the reclaimed material is like an analogous raw material, 4) the extent to which an end market for the reclaimed material is guaranteed, and 5) the extent to which a material is managed to minimize loss. The Agency applied these five factors to the three categories of unprocessed scrap metal to determine if any of these categories meet the criteria for “commodity-like” found at 40 CFR §260.31(c).

The Agency evaluated unprocessed home scrap and prompt scrap against each of the five factors and found that these categories of scrap metal are substantially similar to processed scrap metal due to the availability of established markets for the material’s utilization, inherent positive economic value of the material, the physical form of the material, and the absence of damage incidents attributable to the material. However, the Agency has not found sufficient data for evaluating unprocessed obsolete scrap metal against the set of factors considered when determining if a partially reclaimed material qualifies as "commodity-like," and therefore be granted a variance from the definition of solid waste.

Based on its analysis, the Agency has determined that the scope of the exclusion should be expanded to include both unprocessed home and prompt scrap metal. The Agency is not expanding the scope of the exclusion from the definition of solid waste to include obsolete scrap metal. Providing an exclusion from the definition of solid waste for obsolete scrap metal at this time would be premature and will be better addressed in the Definition of Solid Waste rulemaking, due to be proposed in the near future.

DCN PH4A034
COMMENTER Institute of Scrap Recyclers
RESPONDER RE
SUBJECT SCRP
SUBJNUM 034
COMMENT IN THE ALTERNATIVE, SHOULD EPA ELECT TO RETAIN ITS PROPOSED DISTINCTION BETWEEN "PROCESSED" AND UNPROCESSED SCRAP METAL, CLARIFICATION OF THE TERM "PROCESSING" IS REQUIRED

Although ISRI clearly prefers that EPA not distinguish between processed and unprocessed scrap in promulgating the exemption from the definition of solid waste for scrap metal that is to be recycled, should EPA decide to do so ISRI requests that the Agency clarify its definition of processed scrap metal and provide guidance in the final rule on how the exclusion will be implemented. Specifically, EPA should specify that for the purposes of Subtitle C jurisdiction, scrap metal is solid waste up until the point at which it has passed through the first process operation, regardless of who performs the first processing step. This is further explained below.

RESPONSE

Under the new exclusion for excluded scrap metal, if the scrap metal is not home or prompt scrap, the exclusion will not take effect at facilities until scrap metal has undergone a processing step. Therefore, there will be a certain period of time from the point that the scrap metal is generated until the first processing step that scrap metal will be exempt from the hazardous waste definition, but not excluded from the definition of solid waste (40 CFR §261.6(a)(3)(ii)). A material that meets the definition of scrap metal is excluded from the definition of solid waste when it also meets the definition of excluded scrap metal. If the scrap metal is not one of the unprocessed materials (home or prompt scrap), then the material must meet the definition of processed scrap metal to be excluded from the definition of solid waste. Based on several comments, the Agency has identified chopping, crushing, flattening, cutting and sorting as processes typically used in the processing of scrap metal for recycling that were omitted from the proposed definition. The Agency has added these processes to the definition of processed scrap metal in today's final rule which reads: "scrap metal which has been manually or physically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes but is not limited to scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type (i.e., sorted), and, fines, drosses and related materials which have been agglomerated."

DCN PH4A034
COMMENTER Institute of Scrap Recyclers
RESPONDER RE
SUBJECT SCRP
SUBJNUM 034
COMMENT The Definition of "Processed Scrap Metals" Must be Clarified to Include Chopping, Sorting, and Other Common Processing Steps in the Recycling of Scrap Metals. ISRI requests that EPA modify the definition of processed scrap metal to clarify the range of processes that are typically employed for processing scrap metal. Scrap processors prepare ferrous scrap in a number of ways. By far the most common methods are sorting (identifying and segregating the scrap into different categories or grades before it can be melted into new metal products), shredding (primarily used in processing automobile hulks and appliances), shearing (primarily used in cutting large and heavy scrap - including 1-beams, pipes, ship plate, and railroad cars - into useable sizes), baling (used to compress metals that require greater density before remelting), and torch cutting (used to reduce metal objects into a more manageable size or to separate one metal from another for sorting purposes). Some facilities have more specialized operations, such as choppers (used to process wire and cable through granulation), automotive engine block breakers, flatteners, turnings crushers and borings briquetters. Non-ferrous metal is processed in similar ways. The purpose of all of these operations is to recover the metal content of the scrap by processing it into prepared grades suitable for use in making new metal. Although the definition of processed scrap metal proposed by EPA incorporates many of the above processes for handling scrap metal, not all are included. In addition, the preamble discussion includes a definition of processing which appears to be even narrower than the processed scrap metal definition: "Processing includes 1) manual or mechanical separation of scrap metal either into specific scrap categories containing different metals (e.g., ferrous and nonferrous, copper and steel) or metal and non-metal components (such as shredded steel and fluff), and 2) unit operations such as sintering and melting operations which melt or agglomerate materials such as drosses and fines into scrap metal." ISRI requests that the Agency modify the definition of processed scrap metal as follows in order to further specify processes typically used in the processing of scrap metals for recycling: "scrap metal which has been manually or physically

altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes but is not limited to scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, agglomerated (for fines, drosses and related materials which are not scrap metal prior to agglomeration) or separated by metal type (i.e., sorted). EPA Must Recognize that the Processing of Scrap Metal May Begin at a Point Prior to Delivery of the Scrap Metal to a Scrap Processing Facility According to the preamble discussion to the proposed rule, the exclusion of processed scrap metal from the definition of solid waste is "restricted to scrap metal which has been processed by scrap metal recyclers." The proposed regulation itself does not contain this restriction, but ISRI requests that the Agency acknowledge in the final rule that scrap metal processing is frequently a multi-step process. Scrap metal which is cut, sorted, baled, or otherwise processed by a scrap generator prior to delivery to a scrap processor for further processing has delivered processed scrap to the scrap processor, but the preamble does not seem to recognize this possibility. For example, stamping plants often bale metal Stampings prior to shipment to the scrap processor, generating some of the highest quality baled scrap. Obviously the baled scrap metal should be considered processed when it leaves the stamping plant for recycling. Similarly, if a scrap processor receives a mixed load of scrap metal containing steel pipe, I-beams, and auto parts, sorts the scrap into different grades or different categories from which these different grades can be made (e.g., the steel pipe into #1 steel, the 1-beams into a plate and structural grade, and the auto parts into #2 steel), and then ships some or all of the sorted scrap to a second scrap processor for further processing (e.g., baling or shearing), is the metal considered processed scrap when it arrives at the second yard? The answer should be yes. Scrap processing facilities vary in terms of the equipment they possess and the operations they conduct. The variability in operations is dependent upon a number of factors, not limited to customer needs, resources, transportation requirements, and geographical limitations. As a result, some processing facilities serve as brokers of some scrap metals and processors - both intermediate and final - of other scrap metals. It is very common for scrap processors (or brokers) to purchase processed scrap either for direct resale to

a consumer (e.g., a foundry, smelter, or mill), or for further processing prior to sale. It is also common for generators of industrial scrap to take certain preliminary processing steps prior to deliver of the scrap to a scrap processor. Thus, it would be helpful if the Agency clarified the preamble language when it promulgates the final rule to recognize these scenarios and make it clear that scrap metal exits RCRA jurisdiction at the time it has passed through the first processing operation, regardless of who performs it. There is No Need to Create a Separate Category of "Reusable Metal Materials" in Subtitle C to Address the Reconditioning of Drums. ISRI is aware of the concern of the Association of Container Reconditioners (ACR), as expressed in their letter to this docket dated March 25, 1996, that the definition of "processed scrap metal" be narrowed in some way to assure that reusable metal materials (metal containers) are reused to the maximum extent possible before they are scrapped." Specifically, ACR's comments propose a new category of materials - "reusable metal materials" - that would be exempted from the definition of scrap metal "until they have met separate and specific management criteria." 17 Presumably, the purpose of doing so would be to ensure that drums sent for reconditioning would also be excluded from the definition of solid waste and would not be seen to have any regulatory disadvantage over drums sent for scrap processing. However, ACR fails to recognize that under the current Subtitle C regime, drums being shipped to a reconditioner for reuse are not solid wastes since they were never "discarded," nor would this change under EPA's proposed exclusions for processed scrap metal. Thus, ACR's concern over differing regulatory treatment of drums destined for Reconditioning versus drums destined for scrap processing is unfounded and unnecessary.18

RESPONSE:

In response to information provided by several commenters, the Agency has identified chopping, crushing, flattening, cutting and sorting as processes typically used in the processing of scrap metal for recycling that were omitted from the proposed definition. The Agency has added these processes to the definition of processed scrap metal in today’s final rule which reads: “scrap metal which has been manually or physically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes but is not limited to scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type (i.e., sorted), and, fines, drosses and related

materials which have been agglomerated."

The Agency agrees that today's regulation is a not a disincentive for container reconditioning. Currently, drum reconditioning is a form of recycling activity and is exempt under 40 CFR §261.2(c). Therefore, drums being reconditioned are not affected by today's rule. Such drums are generally fabricated from materials such as carbon steel which do not contain hazardous constituents and would likely not be classified as hazardous. The Agency believes that the proposed regulation does not serve as a disincentive to reuse and therefore, a separate category is not being established in today's final rulemaking.

DCN PH4A034
COMMENTER Institute of Scrap Recyclers
RESPONDER RE
SUBJECT SCRP
SUBJNUM 034
COMMENT METAL-BEARING BY-PRODUCTS GENERATED FROM THE PROCESSING OF SECONDARY MATERIALS ARE "COMMODITY-LIKE" AND, CONSISTENT WITH THIS PROPOSED RULEMAKING, EPA SHOULD EXCLUDE THEM FROM THE DEFINITION OF SOLID WASTE UNDER SECTION 261.4, RATHER THAN CONTINUE THEIR CURRENT EXCLUSION UNDER SECTION 261.2 Metal-bearing by-product materials generated during secondary materials processing (e.g., slags, drosses, and skimmings) are currently categorized by EPA under the general category of "characteristic byproducts," along with a wide range of by-product materials generated by the chemical, manufacturing, and other industries. The broad categorization of materials from such a wide range of industries does not recognize differences in environmental risk and recycling rates that exists between these materials. Similar to scrap metal, and unlike many other by-product materials, metal-bearing by-products generated from secondary materials processes are "commodity-like" in that they pose little environmental risk, possess high intrinsic value, and are recycled at high rates. The fact that metal-bearing by-products are recycled in such high volumes clearly indicates that a demand exists for such secondary materials and that end markets are available. All characteristic by-product materials when reclaimed are exempted from the definition of solid waste under Subtitle C by virtue of 40 CFR Sec. 261.2. EPA is currently re-evaluating this exclusion, along with the entire definition of solid waste, as part of the Agency's "Reengineering RCRA process." Given the similarities between scrap metal and metal bearing by-products, ISRI recommends that the Agency retain the current exclusion from the definition of solid wastes for metal bearing by-products, but remove it from the larger category of by-product materials contained in Sec. 261.2 and place it under Section 261.4 (exclusions). Specifically, EPA should revise proposed Section 261.4(a) so that it reads as; follows: 261.4 Exclusions. (a) * * * (17) Metal-bearing- by-products from secondary materials processes that are being recycled. Although EPA will be addressing the regulation of by-product materials as part of its "Reengineering RCRA process", it would be most appropriate for the Agency to make the above proposed change in

this Rulemaking, since this Rulemaking is focusing on the proper regulation of "commodity-like" materials under Subtitle C.

RESPONSE:

At this time, the Agency is in the process of addressing regulation of by-product materials as part of the Definition of Solid Waste rulemaking. Finalizing the recommended revision is beyond the scope of this rulemaking and would be more appropriately addressed in the context of the Definition of Solid Waste rulemaking. In today's final rule, the exclusion from the definition of solid waste for metal-bearing by-product materials will remain part of the broader exclusion for by-products exhibiting a characteristic of hazardous waste when reclaimed found at 40 CFR §261.2.

DCN PH4A034
COMMENTER Institute of Scrap Recyclers
RESPONDER RE
SUBJECT SCRP
SUBJNUM 034
COMMENT ISRI supports the Agency's proposed exclusion of shredded circuit boards from the definition of solid waste. The shredded boards are sold in international markets for their precious metals content. The current regulatory scheme adds unnecessary cost to the recycling of printed circuit boards. In fact, due to the decreasing amount of precious metals on circuit boards, many recyclers are finding that the costs associated with processing are exceeding the value of the recovered material. The exclusion of the shredded circuit boards from the definition of solid waste will help decrease the costs associated with processing, thus making the recycling of the boards more economical. In a past internal memorandum, the Agency has stated that unprocessed, spent printed circuit boards are considered "scrap metal" due to their physical state and the fact that recoverable metals are an integral part of the boards." Unfortunately, many persons have not had access to this internal memorandum, thus ISRI requests that the Agency reiterate its position with regard to spent printed circuit boards in the final rule promulgating the exclusion for shredded circuit boards.

RESPONSE:

The Agency thanks the commenter for supporting the exclusion from the definition of solid waste for shredded circuit boards. In the final rule, the Agency reiterates the status of whole spent printed circuit boards, and cites the internal memorandum referenced by the commenter, so that the information should be readily available in both the Federal Register form and in the internal memorandum (which is also available to the public).

DCN PH4A034
COMMENTER Institute of Scrap Recyclers
RESPONDER RE
SUBJECT SCRP
SUBJNUM 034
COMMENT ISRI REQUESTS THAT THE AGENCY FIND THAT THE PROPOSED EXCLUSIONS FROM THE DEFINITION OF SOLID WASTE FOR SCRAP METAL AND SHREDDED CIRCUIT BOARDS ARE BEING PROMULGATED PURSUANT TO HSWA SO THAT THE EXCLUSIONS WILL TAKE EFFECT IMMEDIATELY IN ALL THE STATES. In its discussion of state authority, EPA states that the proposed solid waste exclusions for scrap metal and shredded circuit boards fall into the category of rules implementing non HSWA statutory provisions. The effect of such a determination on the part of the Agency is that the environmental and economic benefits of the exclusions will be delayed for a substantial amount of time as each state begins the process of amending its own regulations and EPA approves these changes. Given EPA's intent to promote the recycling of commodity-like materials, it would be more appropriate for the exclusions to take effect in each of the states immediately following promulgation by EPA. Thus, ISRI encourages EPA to include the solid waste exclusions under HSWA such that the exclusions will take effect immediately. If this is not possible, ISRI requests that EPA provide incentives and encouragement to the states to adopt the exclusions in a time efficient manner.

RESPONSE:

Under §3006 of RCRA, EPA may authorize qualified states to administer and enforce the RCRA program within the state. Following authorization, EPA retains enforcement authority under section 3008, 3013, and 7003 of RCRA, although authorized states have primary enforcement responsibility. The standards and requirements for authorization are found in 40 CFR Part 271.

Prior to HSWA and in cases where Federal regulations are promulgated under the authorities provided by RCRA, states with final authorization administer their hazardous waste programs in lieu of EPA administering the Federal program in the states. The Federal requirements no longer apply in authorized states, and EPA can not issue permits for any facilities that the state is authorized to permit. When new, more stringent Federal requirements are promulgated or enacted, states are obliged to enact equivalent authorities and/or regulations within specified time frames. New Federal requirements do not take effect in an authorized state until the state adopts the requirements as state law.

After HSWA took effect, the new RCRA section 3006(g) mandated that if new

requirements and prohibitions are more stringent than the current program, and the new requirements and provisions are written pursuant to a HSWA provision, then the rule takes effect in authorized states at the same time that they take effect in unauthorized states. EPA is directed to carry out these requirements and prohibitions in authorized states, including the issuance of permits, until state are granted authorization. New Federal requirements which are less stringent than state programs do not take effect in authorized states, unless and until the states adopt such provisions.

The determination of whether a new regulation or provision is HSWA or non-HSWA depends upon whether the new provision is written pursuant to the language that was originally promulgated in RCRA in 1976, or language that was changed or appended under HSWA. The Agency has determined that the amendments to the definition of solid waste proposed in the supplemental Phase IV rule were written pursuant to non-HSWA language in RCRA. In addition, the new exclusions are less stringent than the current program. For these reasons, the final rule will not take effect in authorized states until the states adopt the provisions.

DCN PH4A035
COMMENTER Metals Industries Recycling
RESPONDER RE
SUBJECT SCRP
SUBJNUM 035
COMMENT MIRC supports the exclusion of processed scrap metal from the definition of solid waste.

RESPONSE:

The Agency thanks the commenter for supporting the exclusion from the definition of solid waste for processed scrap metal.

DCN PH4A035
COMMENTER Metals Industries Recycling
RESPONDER RE
SUBJECT SCRP
SUBJNUM 035
COMMENT MIRC Supports the Exclusion of Processed Scrap Metal from the Definition of Solid Waste. EPA has proposed to amend the definition of solid waste by excluding "processed scrap metal" that is recycled. Id. at 2361. EPA's proposal is limited to scrap metal which has been "processed" by "scrap metal recyclers" to be "traded on the recycling market" for further reprocessing into metal end products. EPA has defined "processing" of scrap metal to include: "(1) manual or mechanical separation of scrap metal either into specific scrap categories containing different metals (ferrous and non-ferrous, copper and steel) or metal and nonmetal components (such as shredded steel and fluff), and (2) unit operations such as sintering and melting operations which melt or agglomerate materials such as drosses and fines into scrap metal." Id at 2362. As a general matter, NURC strongly supports EPA's proposal to exempt processed scrap metal that is recycled from RCRA jurisdiction. However, the definitions of "partially processed" and "unprocessed" need clarification. the preamble states that "processed scrap metal does not include any distinct components separated from unprocessed or partially processed scrap metal that would not otherwise meet the current definition of scrap metal." It is unclear at which point scrap metal would no longer contain distinct components and would be considered "processed." EPA should clarify this point for the regulated community. MIRC supports the position taken by the Institute of Scrap Recycling Industries, Inc. ("ISRI") that EPA should modify the definition of processed scrap metal as follows: Scrap metal which has been manually or physically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes but is not limited to scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, agglomerated (for fines, drosses and related materials which are not scrap prior to agglomeration) or separated by metal type (i.e., sorted). (See ISRI) Scrap metal should exit RCRA Subtitle C at the point that the material has been diverted or removed from the solid waste stream for the purpose of recycling, or, alternatively, at the point that the scrap metal

has passed through the first processing operation (see id. 6-9). EPA has not adequately defined "scrap metal recyclers." It is not clear from the preamble whether anyone would be considered a scrap metal recycler or whether it is limited to individuals meeting specific criteria. It is equally unclear what is meant by "traded on the recycling market." As proposed, EPA's exclusion may not apply to scrap metal that is not "traded on the recycling market." Some scrap metal is sold directly to a recycler or otherwise processed by a facility for its own recycling purposes. EPA should clarify that the scrap metal exemption would apply equally to all processed scrap metal regardless of who performs the processing and whether it is actually traded on the recycling market. Such a clarification would accommodate those that process scrap metal for their own use (i.e., an electric arc steel maker that operates its own scrap yard or remelts unprocessed "home" scrap). MIRC also encourages EPA to continue evaluating the appropriateness of exempting all scrap metal from the definition of solid waste. In the meantime, NIRC supports maintaining the exemption from the definition of hazardous waste for unprocessed scrap metal that is recycled.

RESPONSE:

The Agency would like to thank the commenter for supporting the exclusion from the definition of solid waste for excluded scrap metal. The commenter has raised several different issues for response: a request for clarification of the terms “partially processed” and “unprocessed;” the point at which scrap metal would be considered “processed;” and a request for clarification of the terms “scrap metal recycler” and "traded on the recycling market."

EPA employed the terms “unprocessed” and “partially processed” scrap metal in the preamble to clarify the term “processed scrap metal.” The term “partially processed scrap metal” was used in the preamble as a way of indicating that scrap metal meeting the definition of processed scrap metal need not be completely recycled, but may have completed one of several steps in the process of recycling the material. For instance, scrap metal that has been cut and sorted by the generator prior to being sent to a scrap metal recycler would meet the definition of processed scrap metal. The term partially processed scrap metal was intended to convey this type of activity. Therefore, in the context of the final rulemaking, the term “partially processed scrap metal” has the same meaning as the term “processed scrap metal.” The term “unprocessed scrap metal” covers the universe of scrap metal which does not fall within the definition of processed scrap metal.

The language in the proposal was not intended to limit excluded materials from the definition of processed scrap metal if the processing does not occur at a scrap metal dealer. In the final rule the Agency clarifies that the exclusion for processed scrap metal being recycled applies

to scrap metal that has undergone a processing step (as defined in the preamble to the proposed rule) regardless of who does the processing. In other words, a processing step may be performed by the generator, an intermediate scrap handler (e.g., broker, scrap processor), or a scrap recycler.

Additionally, the commenter requested clarification concerning whether the applicability of the exclusion would be affected by the point at which the processing is conducted. As discussed in the preceding section, the exclusion for processed material is not effective until the scrap metal has been processed. Once the scrap metal has undergone a processing step, it may qualify for the exclusion from the definition of solid waste.

Finally, the term "traded on the recycling market" is intended to convey that a market exists for the material and therefore the material is likely to be handled as a valuable commodity. This rationale holds true for materials which are recycled or processed on-site to enhance a facility's process.

DCN PH4A036
COMMENTER ASARCO Incorporated
RESPONDER RE
SUBJECT SCRP
SUBJNUM 036
COMMENT The exclusion for shredded circuit boards should be expanded. ASARCO supports EPA's proposed exclusion from the definition of solid waste for shredded circuit boards destined for metal recovery that are containerized. There are, however, additional materials related to the manufacture of circuit boards that are also recycled within the primary mineral processing industry that should likewise be excluded from the definition of solid waste. For example, Asarco's East Helena plant processes valuable silver and gold fines and dusts that are by-products of the circuit board manufacturing process. As circuits are carved into a board, a dust containing copper, gold and silver is produced. The dust is collected and shipped to East Helena for metals recovery and these materials are containerized during shipment and storage. Therefore, EPA should exclude metal-bearing dusts and fines generated in the production of circuit boards from the definition of solid waste for all the reasons EPA has identified to exclude shredded circuit boards. Although the current precious metals exclusion may apply to these materials, see 40 C.F.R. S 266.70, the more tailored or particularized relief for recycled circuit boards would be more appropriate.

RESPONSE:

Several commenters requested that EPA expand the scope of the exclusion to include other secondary materials that are currently classified as solid and hazardous wastes such as F006 (wastewater treatment sludges from electroplating operations) and metal-bearing dusts and fines. EPA is currently working on a proposed rule to amend the definition of solid waste and believes that effort is the correct forum to address the regulatory status of these additional materials.

DCN PH4A053
COMMENTER Inco Ltd., Internat'l Met
RESPONDER RE
SUBJECT SCRP
SUBJNUM 053
COMMENT The Proposal To Exclude Processed Scrap Metal and Shredded Circuit Boards that are recycled from the definition of Solid Waste also is sound. We also support EPA's proposal to exclude processed scrap metal and shredded circuit boards that are recycled from the definition of solid waste. As EPA correctly notes, processed scrap metal clearly qualifies as "commodity-like" when evaluated in terms of the factors that the Agency has established for making that determination, i.e., "1) the degree of processing the material has undergone and the degree of further processing that is required, 2) the value of the material after it has been reclaimed, 3) the degree to which the reclaimed material is like an analogous raw material, 4) the extent to which an end market for the reclaimed material is guaranteed, 5) the extent to which a material is managed to minimize loss." 61 Fed, Reg, at 2362. We note in passing that application of these same factors would lead to a conclusion that high temperature metals recovery slag is "commodity-like" as well. EPA also is on sound ground in proposing to exclude from the definition of solid waste shredded circuit boards destined for metal recovery, provided that they are managed in containers sufficient to prevent a release to the environment during storage and shipment to the recovery facility. As the Agency observes, it is important to create a conditional exclusion of this sort for shredded circuit boards "in order to facilitate recovery of this material." See 61 Fed. Reg. at 2362/3. EPA should recognize that creating comparable conditional exclusions for other metal-bearing materials will facilitate recovery of those materials as well. As discussed in Part I, above, one way of accomplishing this would be to broaden and generalize the conditional exclusion that the Agency has proposed to establish for characteristically hazardous secondary materials generated and reclaimed within the primary mineral processing industry. We urge EPA to expedite the development of a generalized conditional exclusion for all metal-bearing secondary materials that are destined to be reclaimed.

RESPONSE:

The Agency thanks the commenter for supporting the exclusion from the definition of solid waste for both excluded scrap metal and shredded circuit boards. The commenter also suggested two other wastes that should be excluded. First, the commenter suggested that high temperature metals recovery (HTMR) slag could qualify for an exclusion based upon the five factors under 40 CFR §260.31(c) that EPA uses to evaluate whether partially reclaimed materials qualify for an exclusion from the definition of solid waste. EPA is currently working on a rulemaking that addresses the regulatory status of HTMR slag and the Agency believes that there is no reason to discontinue that effort. The commenter also suggested evaluating other metal-bearing materials under the same five factors. EPA is currently working on a proposed rule to amend the definition of solid waste and believes that effort is the correct forum to address the regulatory status of any additional metal-bearing materials. However, the Agency points out that any party may petition the EPA or state, if authorized, for a variance from classification as a solid waste for materials that are partially reclaimed. Partially reclaimed materials may be granted a variance from classification as solid waste, if after reclamation, the resulting material is "commodity-like." The Regional Administrator will evaluate such a petition and make a determination based on the evaluation factors for determining whether a partially-reclaimed material is "commodity-like" provided in 40 CFR 260.31(c).

DCN PH4A054
COMMENTER RSR Corporation
RESPONDER RE
SUBJECT SCRP
SUBJNUM 054
COMMENT RSR supports the proposed exclusion for "processed scrap metal" from the RCRA definition of solid waste. RSR urges EPA to clarify that batteries and certain materials associated with lead-acid batteries are not "processed scrap metal."

RESPONSE:

The Agency thanks the commenter for supporting the proposed exclusion from the definition of solid waste for excluded scrap metal. In the preamble to the proposal, the Agency discussed materials which are not considered to be excluded scrap metal. The Agency explained that “excluded scrap metal does not include any distinct components separated from unprocessed or partially processed scrap metal that would not otherwise meet the current definition of scrap metal.” The language in the preamble was intended to clarify that any distinct components that are separated from the scrap metal that would not otherwise meet the current definition of scrap metal would not meet the definition of processed scrap metal. The language was not intended to confuse the existing definition of scrap metal. In the January 4, 1985 preamble (50 FR 614), the Agency defined scrap metal as bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that are combined together with bolts and soldering (e.g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled. The Agency excluded from the definition of scrap metal: secondary materials from smelting and refining operations (e.g., slags, drosses, and sludges), liquid waste containing metals (e.g., spent acid and caustics), liquid metal wastes (e.g., liquid mercury), and metal-containing wastes with a significant liquid component (e.g., spent lead acid batteries). For a material to qualify as processed scrap metal, it must first meet the definition of scrap metal. Under today’s exclusion, the existing definition of scrap metal continues to apply. Therefore, secondary materials from smelting and refining operations (e.g., slags, drosses, and sludges), liquid wastes containing metals (e.g., spent acids and caustics), liquid metal wastes (e.g., liquid mercury), and metal-containing wastes with a significant liquid component (e.g., spent lead acid batteries) do not meet the definition of scrap metal and therefore do not qualify as excluded scrap metal.

DCN PH4A054
COMMENTER RSR Corporation
RESPONDER RE
SUBJECT SCRP
SUBJNUM 054
COMMENT Based on the foregoing, RSR believes that the options and proposed exemptions are patently unfair. If the rationale for the proposed exemption holds true for the primary industry, it should hold equally true for the secondary metals industry. RSR thus urges EPA to abandon the expansive approach as proposed, or to promulgate a like exemption for the secondary metals industry.

RESPONSE

The commenter's request is beyond the scope of the proposed exclusion for scrap metal and shredded circuit boards proposed in the Phase IV supplemental rule.

DCN PH4A054
COMMENTER RSR Corporation
RESPONDER RE
SUBJECT SCRP
SUBJNUM 054
COMMENT RSR supports the proposed exclusion for "processed scrap metal" from the RCRA definition of solid waste, provided that it is EPA's intent to exclude from this definition materials such as lead-acid batteries, and certain other lead-bearing materials generated by battery reclamation and/or separation activities. RSR agrees with EPA's conclusion that processed scrap metal (as defined in the proposed rule) is sufficiently "commodity like", and that regulation of this material is not necessary. RSR seeks clarification on the definition of "processed scrap metal. " EPA's proposed definition of this term is as follows: "Processed scrap metal" is scrap metal which has been manually or mechanically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes but is not limited to scrap metal which has been bailed, shredded, sheared, melted, agglomerated (for fines, across and related materials which are not scrap metal prior to agglomeration) or separated by metal type. EPA's preamble discussion on this definition states that the term "processed scrap metal" is not intended to include batteries, spent acids, slags, dross, ashes, and sludges that have a form dissimilar to scrap metal. RSR believes excluding these types of materials from the definition is appropriate and consistent with EPA's past interpretations on the RCRA regulatory status of such materials. Provided that EPA clearly intends to exclude such materials from the definition of "processed scrap metal," RSR supports the proposed exemption. RSR is concerned, however, that the proposed regulatory definition does not accurately reflect this intent, particularly agglomerated materials. Regulated entities or State agencies could construe the parenthetical statement to mean that dross, etc., are considered processed scrap metal. This concern is heightened by the fact that EPA 's clarification limiting the scope of the proposed definition is contained in the preamble, and not clearly reflected in the proposed regulatory language. To ensure that EPA's intent is clear in this regard. RSR recommends that EPA revise the definition of processed scrap metal as follows (suggested revisions are redlined): "Processed scrap

metal is scrap metal which has been manually or mechanically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes but is not limited to scrap metal which has been bailed, shredded, sheared, melted, agglomerated (for fines, dross and related materials which are not scrap metal prior to agglomeration) or separated by metal type. "Processed scrap metal" does not include lead-acid batteries, slags, dross, ashes, sludges, capacitors, or other liquid-bearing material, fluff, or other non-metal residuals, liquid metals such as mercury, or spent caustics or acids, or distinct components separated from these materials.

RESPONSE:

In the preamble to the proposal, the Agency discusses materials which are not included within the definition of excluded scrap metal. The Agency explained that "excluded scrap metal does not include any distinct components separated from unprocessed or partially processed scrap metal that would not otherwise meet the current definition of scrap metal." The language in the preamble was intended to clarify that any distinct components that are separated from the scrap metal that would not otherwise meet the current definition of scrap metal would not meet the definition of excluded scrap metal. The language was not intended to confuse the existing definition of scrap metal. In the January 4, 1985 preamble (50 FR 614), the Agency defined scrap metal as bits and pieces of metal parts (e.g., bars, turning, rods, sheets, wire) or metal pieces that are combined together with bolts and soldering (e.g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled. The Agency excluded from the definition of scrap metal: secondary materials from smelting and refining operations (e.g., slags, drosses and sludges), liquid waste containing metals (e.g., spent acid and caustics), liquid metal wastes (e.g., liquid mercury) , and metal-containing wastes with a significant liquid component (e.g., spent lead acid batteries). In order for a material to qualify as processed scrap metal, it must first meet the definition of scrap metal. Under today's exclusion, the existing definition of scrap metal continues to apply. Therefore, secondary materials from smelting and refining operation (e.g., slags, drosses, and sludges), liquid wastes containing metals (e.g., spent acids and caustics), liquid metal wastes (e.g., liquid mercury), and metal-containing wastes with a significant liquid component (e.g., spent lead acid batteries) do not meet the definition of scrap metal and therefore also do not qualify as excluded scrap metal.

DCN PH4A055
COMMENTER Copper & Brass Fabricator
RESPONDER RE
SUBJECT SCRP
SUBJNUM 055
COMMENT The Council Supports the Agency's Proposed Exclusion of Processed Scrap Metal from the Definition of Solid Waste. The Council agrees with the Agency that processed scrap metal which has been diverted or removed from the waste stream for recycling is sufficiently commodity-like that regulation is not necessary. The Council further supports the Agency's recognition that, because of its physical qualities, processed scrap metal has not historically contributed to the waste management problem and it is unlikely to do so in the future. The Agency's decision to exclude scrap metal will further encourage the already active beneficial recycling activities that are more analogous to manufacturing operations than waste management. In its proposed rule, the Agency cites five factors it considered in determining whether to exclude processed scrap metal from the definition of solid waste. The Council supports the Agency's rationale for each factor and adds the following comments as they relate to the brass mill industry: 1. The degree of processing the material has undergone and the degree of further processing that is required. Processed scrap metal generated from brass mill operations must meet strict industry specifications for metal content in order to be sold as a commodity. Shipments not meeting these strict standards are rejected. Scrap metal sold as a commodity undergoes substantial processing before being sourced as raw material for a fabricated product. For example, brass fines would be remelted along with other brass scrap to be used as raw material for brass sheet. 2. The value of the material after it has been reclaimed. As acknowledged by the Agency, scrap metal is traded both nationally and internationally in markets. In the United States, the copper is listed daily in the American Metal Market, reporting on the metals industry, and copper brass mills is sold at prices related to virgin copper. For example, on April 19, copper scrap from brass mills was priced at $117.25/lb and AMM virgin copper cathode was priced at $129.00/lb. 3 .The degree to which the reclaimed material is like an analogous raw material. In the brass mill industry, the principal raw material source is scrap metal, not virgin metal. Brass products (copper and zinc alloy) made from scrap are chemically

and metallurgically equivalent to products manufactured from virgin copper and zinc. The difference in input material does not affect the chemical composition, the physical characteristics, or the end use of the finished brass mill products. 4 The extent to which an end market for the reclaimed materials is guaranteed. End markets for scrap metal from brass mill operations are guaranteed. Brass mills reuse their own scrap metal or sell to recyclers. Recyclers will often further process the material and resell to the original mill under a tolling arrangement. In other words, all metals generated from brass mill operations are reused. With its reduced costs and environmental benefits, the demand for scrap metal as a raw material source will only grow in the future thus ensuring the availability of end markets. 5. The extent to which a material is managed to minimize loss. Scrap metal from brass mill operations is in a solid non-dispersible form so that loss is minimal. Because of its commercial value, scrap metal resulting from brass mill operations is contained in a designated area with minimal handling and movement until it is reused. This type of beneficial reuse offers minimal risk to the environment. By recognizing that processed scrap metal is a commodity-like material and not solid waste, the Agency is removing a significant disincentive to recycling. The proposed exemption will minimize the regulatory burden currently associated with scrap metal and provide added economic and other incentives to recycle the material. Further, the exclusion of scrap metal from the U.S. definition of solid waste as expressed in RCRA, would add consistency and support to the U.S. position with respect to the ban placed on the transboundary movement of solid wastes, some of which are recyclable materials, under the Basel Convention. The United States has not ratified the Basel Convention and it is unlikely to do so until it has clear guidance from the Convention's Technical Working Group on what recyclable materials are covered by the ban. The United States has advanced the position that scrap metal should be excluded from the jurisdiction of the Basel Convention. The Agency's decision to exclude scrap metal from RCRA jurisdiction would bring the U.S. domestic regulatory scheme in line with the position the United States has taken internationally.

RESPONSE:

The Agency thanks the commenter for supporting the exclusion from the definition of solid waste for scrap metal.

DCN PH4A055
COMMENTER Copper & Brass Fabricator
RESPONDER RE
SUBJECT SCRP
SUBJNUM 055
COMMENT Metal bearing by-products generated from the processing of secondary materials are commodity-like metal bearing by-products generated during secondary materials processing (e.g., slags, drosses, and skimmings) are currently categorized by the Agency under the general category of "characteristic by-products" under RCRA. Unlike other by-products in this general category, metal bearing by-products resulting from secondary materials processing possess high intrinsic value and are recycled at high rates. For example, zinc-rich baghouse dusts captured from secondary copper and brass smelting and casting operations were marketed as commodities long before methods to capture emissions were required by air pollution control regulations. Like scrap metal, metal bearing by-products are recycled on-site as raw material or sold to recyclers who further processes the by-product for various applications. Further, like scrap metal, a demand exists for secondary materials and end markets are available. Thus they are more like scrap metal than by-products. Currently, characteristic by-products when reclaimed are exempted from the definition of solid waste under 40 CFR section 261.2 (Definition of solid waste) . Given the similarities between scrap metal and metal bearing by-products, the Council recommends that the Agency retain the current exemption for metal bearing byproducts, but provide it under 40 CFR section 261.4 (Exclusions). Although the Agency will be addressing the regulation of byproducts as part of its "Reengineering RCRA for Recycling" initiative, metal bearing by-products generated from the processing of secondary materials are commodity-like. Therefore, consistent with this rulemaking, the Council requests that the Agency exclude metal bearing by-products under section 261.4 rather than continue their exclusion under section 261.2.

RESPONSE:

Currently, by-products exhibiting a characteristic of hazardous waste are excluded from the definition of solid waste when reclaimed (40 CFR §261.2). The commenter is correct in stating that metal-bearing by-product materials generated during secondary material processing,

such as slags, drosses, skimmings, and sludges, retain the current exclusion from the definition of solid waste when reclaimed. The regulatory status of reclaimed by-products is beyond the scope of this rulemaking. The Agency is in the process of addressing the regulation of by-product materials as part of the upcoming Definition of Solid Waste rulemaking. Finalizing the commenter's recommended revision is beyond the scope of this rulemaking and is more appropriately addressed in the context of the Definition of Solid Waste rulemaking. In today's final rule, the exclusion from the definition of solid waste for metal-bearing by-product materials will remain part of the broader exclusion for by- products exhibiting a characteristic of hazardous waste when reclaimed found at 40 CFR §261.2.

DCN PH4A056
COMMENTER Utility Solid Waste Activities Group
RESPONDER RE
SUBJECT SCRP
SUBJNUM 056
COMMENT USWAG supports EPA's proposal to exclude from the definition of solid waste processed scrap metal and shredded circuit boards that are managed in containers. 61 Fed. Reg. at 2361 -63. This proposal is grounded in sound environmental policy and will encourage and promote the recycling of these waste streams. While this proposal is a step in the right direction, USWAG believes that the use of separate rulemakings on a case-by-case basis is not the most efficient or productive method for excluding recyclable waste streams from the RCRA program. This approach involves an extraordinarily onerous and time-consuming mechanism for advancing recycling. This is especially true in the case of the electric utility industry, which generates many secondary recyclable materials that are more "commodity-like" than "waste-like" (e.g.., slightly contaminated mercury that must be "cleaned up" prior to reuse), but that nonetheless are labeled as "solid wastes" under the current regime and are faced with market entry barriers common to most recyclable solid wastes. As EPA itself recognizes, the designation of a recyclable material as a "solid waste" stigmatizes the waste stream and creates a significant deterrent to its beneficial reuse. Id. at 2363. Attempting to remove these barriers on a case-by-case basis through individual notice and comment rulemakings, as is being proposed for circuit boards, is inefficient and unnecessarily delays the commercial advantages and environmental benefits of increased recycling. A more productive and efficient approach would be for EPA to establish self-implementing criteria for qualifying for a variance from the definition of "solid waste" - i.e., establishing readily identifiable factors for distinguishing between "solid waste" and "commodity-like" secondary materials that do not warrant "solid waste" designation -- in lieu of making such determinations through the case-by-case approach under the current 40 C.F.R. §260.31 procedure. Indeed, the very cornerstone of the RCRA program is predicated on the regulated community using a self-implementing procedure to determine whether a "solid waste" is hazardous (e.g.., per 40 CFR 262.11); surely, a similar self-implementing procedure can be used by the regulated community to distinguish between

"commodity like" secondary materials and "solid wastes." USWAG also understands that EPA is preparing its comprehensive proposal to amend the definition of "solid waste" to simplify the requirements applicable to recycling. This effort also will advance recycling efforts while reducing unnecessary regulatory burdens. USWAG urges EPA to issue this proposal as soon as possible.

RESPONSE:

The Agency thanks the commenter for supporting the exclusions from the definition of solid waste for excluded scrap metal and shredded circuit boards that are being reclaimed or recycled.

The commenter seems to be taking the position that promulgating exclusions for recyclable materials one by one is inefficient because there are many wastes that could be considered to be commodity-like, and therefore should be excluded from the definition of solid waste. The commenter's request is beyond the scope of this rulemaking and is better addressed in the Definition of Solid Waste rulemaking, due to be proposed in the near future.

DCN PH4A075
COMMENTER Recyclers of Copper Alloy
RESPONDER RE
SUBJECT SCRP
SUBJNUM 075
COMMENT The commercial recycling of copper alloy products has been a dynamic aspect of the United States economy for nearly three quarters of a century. RE-CAP's comments seek to ensure that EPA and others who may review this Docket are aware of the scope and importance of copper alloy recycling. We do so to underscore the concomitant importance of EPA ensuring that its final rule continues to recognize, as appears to be intended by the Agency, that the commodity-like nature of scrap metal (including metal by-products) warrants exclusion from RCRA Subtitle C jurisdiction under 40 CFR Part 261.4. In this regard, we incorporate the comments which were filed in this Docket by the Institute of Scrap Recycling Industries, Inc. on April 18, 1996, and by the Copper and Brass Fabricators Council, Inc. on April 24, 1996. See also Eastman Kodak Company's April 17, 1996, comments in this Docket at 1-2, and RE-CAP's May 15, 1995, submission to the EPA Reengineering Task Force (SERVICES 212A) concerning commodity like secondary materials. At least 4 billion pounds (2 million tons) of brass and recycled copper alloys are recycled every year in the United States. The alloys are recycled by a wide variety of industries. For example, nearly all of the brass used by the American plumbing fittings industry comes from recycled copper alloys. The faucet you use today may have been made from the faucet which your grandfather used as a child. And your faucet eventually will become the scrap from which these and other copper alloy products are made. More than 30 million faucets are produced annually in the United States. Brass and bronze are among the oldest and most valuable metal alloys known, having been employed by people for millennia in a multitude of ways. (Brass is a mixture of copper and zinc and bronze a mixture of copper and tin, both in varying proportions.) 1,774,300 short tons of copper in scrap of all kinds was consumed in 1994, the last year for which complete data is available. This is 3.55 billion pounds, and this is the copper content of all the scrap consumed. The total tonnage of scrap is of course higher. In 1994, scrap supplied 47.3% of the total copper consumed in the United States. Total consumption was 3,754,1 00 tons. (Copper Development Association, Copper Supply and Consumption in the United States - 1994.) Our copper

alloy and secondary metals recycling industry is a priceless asset. While the art of alloying copper has been utilized for thousands of years, it remained for twentieth-century America to initiate and enjoy the many benefits of large-scale production of high quality, dependable copper-based alloys in ingot form, conforming to exacting specifications and offering substantial economies. The primary reasons for this phenomenon center on the increasing diversity of manufacturing and the increasing need for conserving the Nation's resources. Each and every ton of recycled copper alloys represents: Many tons of pollution not introduced into our atmosphere; Thousands of pounds of valuable metals not sent to already overburdened landfills; Acres of land conserved and not stripped to expose the minerals below; A substantial energy savings; and Several more tons of ore that aren't unnecessarily mined and refined. See also comments of Institute of Scrap Recycling Industries, Inc., Apr-. 19, 1996, at n. 1. This reservoir of recycled copper alloy products is indeed an important part of our national treasure. These products are essential to our nation's highly diversified and interdependent economy, as well as to our national defense. Automobile radiators, free-cutting brass rod and other machining turnings, obsolete faucets, and a wide variety of other copper alloy scrap are collected and processed as part of this large U.S. secondary metals industry. Scrap is melted and alloyed to exacting specifications by ingot manufacturers, brass mills and foundries in the manufacturing of thousands of consumer, industrial and military components and products, such as components for everyday use in: elevators, light switches, brass lamps, lawn sprinklers, screws and bolts, door hinges, doorknobs, keys, and golf club heads; Valves, faucets and other plumbing products: these are critical to the construction and housing industry; Fire sprinklers and fire hydrants; Bearings: - these facilitate rotating and sliding parts with minimal friction in engines, gears and transmissions in passenger automobiles; diesel trucks and tractors, mining and other machinery; military aircraft, tanks and aircraft carriers the slide along which the aircraft launching catapult travels); Worm Wheels: they are needed for RPM reduction, which conserves fuel; they enable equipment such as hospital beds, or winches on military vehicles, to be raised and lowered; Impellers: they provide circulation in irrigation pumps, sewage pumps, and pumps critical to paper mills and numerous other industries; Pump

housings, pressure regulators, water meters, and other water utility hardware; Electrical power equipment and transmission line hardware; and Radar wave guidance: here the copper alloy's non-magnetic properties are essential. Further perspective on copper alloy recycling may be helpful. By way of example, we turn to the ingot industry component of our coalition. The production of quality ingot metal alloys is not. a simple melting process, but is a fully developed, carefully supervised, and scientifically controlled refining process. When an article of copper or copper alloy, be it an automobile radiator, a faucet, a trolley wire, a valve, a door handle, or a ship's propeller, has served its purpose or is no longer fit for service, it is ready to be converted into something useful. The ingot industry consumes more than 150 million pounds of automobile radiators every year, and one must add to this the fact that the wrought industry consumes more than 300 million pounds of scrap every year in making plumbing fittings alone. Metal value is continually present in this equipment, even though the equipment is no longer of value for its original purpose. Copper has been said to be an everlasting metal. While it does not last forever in any one form, it is continually being recovered, refined, realloyed, reworked, and used again. Indeed, this revolving fund of recyclable metal in industry is a significant item in the total reserves of the United States. It is in this connection that the ingot industry plays its most important role. It converts copper products that have been diverted or removed from the solid waste stream into useful metal so that they again become active in industry. We hope that these comments have provided EPA and others who may review this Docket with a better understanding of recycled copper alloy products' critical importance to manufacturing in the United States. With this background in mind, we again urge EPA to ensure that its final rule continues to exclude these materials from RCRA Subtitle C jurisdiction.

RESPONSE:

The Agency thanks the commenter for supporting the exclusion from the definition of solid waste for scrap metal. In today's final rule, the Agency has expanded the scope of the exclusion to include home scrap metal (e.g., turnings, cuttings, punchings, and borings generated by steel mills, foundries, and refineries) and prompt scrap metal (e.g., turnings, cuttings, punchings, and borings generated by the metal working/fabrication industries).

DCN PH4A077
COMMENTER The Aluminum Association
RESPONDER RE
SUBJECT SCRP
SUBJNUM 077
COMMENT The Aluminum Association ("Association"), in conjunction with its member companies, is pleased to submit comments to the above-referenced rule. The Aluminum Association is a trade association founded in 1933 and comprised of seventy-six members of the aluminum industry in the United States. Member companies include producers of primary and secondary aluminum, aluminum alloys, semi-fabricated wrought, cast aluminum, and related products. These comments address two major issues: (1) EPA's decision to exclude processed scrap metal being reclaimed from the definition of a solid waste under RCRA, and (2) the merits of affording a comparable exclusion to cover the aluminum byproducts skims and drosses. 1. The Association supports EPA's decision to exclude processed scrap metal from the RCRA definition of solid waste. The Association commends the Agency for its proposal to amend the definition of solid waste to exclude processed scrap metal being recycled from RCRA jurisdiction. Association members are intent on recovering metal from aluminum products, and treat scrap metal as a valuable commodity, which meets all criteria set by the Agency for avoiding regulation as a waste.

RESPONSE:

The Agency thanks the commenter for supporting the exclusion from the definition of solid waste for scrap metal.

DCN PH4A077
COMMENTER The Aluminum Association
RESPONDER RE
SUBJECT SCRP
SUBJNUM 077
COMMENT Under RCRA's current regulatory scheme, scrap metal is regulated as a solid waste. Scrap metal is defined as "bits and pieces of metal parts or metal pieces that are combined together with bolts or soldering, which when warm or superfluous can be recycled. " 40 CFR 26 1. 1 (c)(6). However, EPA exempted from RCRA Subtitle C regulation all scrap metal being recycled. 40 CFR 261.6(a)(3)(ii). According to EPA, this was an interim measure taken to allow the Agency to study scrap metal management and determine whether regulation was necessary 50 Fed. Reg. 614, 649 (Jan. 4, 1985). The proposed regulation would change the method by which processors of scrap metal avoid "waste" management requirements. Under the proposal, EPA would specifically grant an exclusion, under 40 C.F.R. §261.4(a), from the definition of solid waste for "processed scrap metal" being reclaimed. The proposed rule defines "processed scrap metal" as "scrap metal which has been manually or mechanically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials." 61 Fed. Reg. 2,338, 2,371 (Jan. 25, 1996). While the Association embraces EPA's exclusion of processed scrap from solid waste regulation, it also supports the suggestion of the Institute of Scrap Recycling, Inc. ("ISRI") that EPA should modify its proposal so that all scrap metal diverted or removed from the solid waste stream and destined for recycling is excluded from the definition of solid waste. As detailed in ISRI's comments, unprocessed scrap removed from the solid waste stream for recycling has the same commodity-like nature as processed scrap, and creating an artificial distinction between the two will create unnecessary confusion for individual facility operators.

RESPONSE:

In response to information provided by commenters, EPA identified and studied three different types of unprocessed waste to determine whether the scope of the proposed exclusion should be expanded: home scrap metal, prompt scrap metal and obsolete scrap metal. Home scrap is scrap metal generated by steel mill, foundries, and refineries such as turnings, cuttings, punchings, and borings. Prompt scrap, also known as industrial or new scrap metal, is generated

by the metal working/fabrication industries and includes such scrap metal as turnings, cuttings, punchings, and borings. Obsolete scrap metal is composed of worn out metal or a metal product that has outlived it original use, such as automobile hulks, railroad cars, aluminum beverage cans, steel beams from torn down buildings, and household appliances.

The Agency uses five factors when evaluating whether a partially-reclaimed material is "commodity-like" and is not part of the waste management problem and thus is appropriate to exclude the material from RCRA Subtitle C jurisdiction through issuance of a variance (40 CFR §260.31(c)). The five factors are: 1) the degree of processing the material has undergone and the degree of further processing that is required, 2) the value of the material after it has been reclaimed, 3) the degree to which the reclaimed material is like an analogous raw material, 4) the extent to which an end market for the reclaimed material is guaranteed, and 5) the extent to which a material is managed to minimize loss. The Agency applied these five factors to the three categories of unprocessed scrap metal to determine if these categories meet the criteria for “commodity-like” found at 40 CFR §260.31(c).

The Agency evaluated unprocessed home scrap and prompt scrap against each of the five factors and found that these categories of scrap metal are substantially similar to processed scrap metal due to established markets for the material’s utilization, the inherent positive economic value of the material, the physical form of the material, and the absence of damage incidents attributable to the material. based on this analysis, the agency has expanded the scope of the exclusion for scrap metal to include both unprocessed home and unprocessed prompt scrap metal.

The Agency has not found sufficient data for evaluating unprocessed obsolete scrap metal against the set of factors used to determine if a partially reclaimed material qualifies for a variance from the definition of solid waste. Therefore, the Agency is not expanding the scope of the exclusion from the definition of solid waste to include obsolete scrap metal. Providing an exclusion from the definition of solid waste for obsolete scrap metal at this time would be premature and is better addressed in the Definition of Solid Waste rulemaking, due to be proposed in the near future.

DCN PH4A077
COMMENTER The Aluminum Association
RESPONDER RE
SUBJECT SCRP
SUBJNUM 077
COMMENT The Aluminum

Association urges EPA to extend the exclusion for scrap metals to skims and drosses, aluminum processing by-products that have commodity-like characteristics similar to scrap metal. Aluminum skims and drosses are valuable materials and are considered an important metal source by the aluminum industry. Because these by-products contain fully recoverable metal, they are not discarded or landfilled.

Skims and drosses are by-products generated as part of the aluminum melting process. Whenever molten aluminum is exposed to the atmosphere, a thin layer of aluminum oxide forms on its surface. Scrap aluminum being melted is coated with aluminum oxide. This oxide material is the starting point for by-products derived from melting aluminum. The oxide layer increases during stirring, transferring, fluxing or pouring operations, and floats to the surface of the molten aluminum. It builds up in troughs, furnaces, and crucibles during the casting process, and free aluminum becomes mixed and entrapped with the oxide. "Dross," in this context, refers to a solidified material generally consisting of oxides of aluminum and other alloying -materials such as magnesium, formed when molten aluminum reacts with the atmosphere or moisture. The term "skim" connotes an accumulation of oxide with entrapped metal, formed on the metal surface after melting from oxide films introduced as surface oxides on all charge components.

Skims and drosses are currently categorized by EPA as "characteristic by-products," along with a variety of by-product materials generated by chemical and manufacturing industries. When reclaimed, all characteristic by-products are exempt from the definition of a solid waste under 40 CFR 261.2. That the current broad "characteristic by-product" category captures skims and drosses evidences the category's failure to recognize the differences in environmental risk and recycling rates that exists for aluminum skims and drosses as opposed to other byproducts. Similar to scrap metal, and unlike many other by-product materials, aluminum skims and drosses are "commodity-like," posing little environmental risk, high intrinsic value, and are recycled at higher rates.

EPA has not proposed to create a similarly favorable exclusion for skims and drosses as it has for scrap metal.

But, skims and drosses would continue to be exempt, as well as all characteristic by-products, from treatment as a solid waste if they were reclaimed. In its decision to amend the definition of solid waste to exclude scrap metal, EPA was properly guided by 40 C.F.R. 260.31(c). This provision states that the Agency may grant requests for a variance from classifying as a solid waste those materials that have been reclaimed but must be reclaimed further before recovery is completed if, after initial reclamation, the resulting material is "commodity-like." This determination must be based on the following factors: (1) the degree of processing the material has undergone and the degree of further processing that is required, (2) the value of the material after it is reclaimed, (3) the degree to which the reclaimed material is like an analogous raw material, (4) the extent to which an end market for the reclaimed material is guaranteed, (5) the extent to which the reclaimed material is handled to minimize loss, and (6) other relevant factors. 40 C. F. R. _260.3 1 (c). As detailed below, because aluminum skims and drosses meet the criteria for recycling listed in 40 C. F. R. _260.3 1 (c), the exclusion should be extended to these by-products as well. 1 The Degree of Processing Done to Skims and Drosses Supports Their Treatment as Commodity Metals EPA has articulated the policy that the more substantial the initial processing, the more likely the resulting material is to be commodity-like. 50 Fed. Reg. at 655. In the preamble to the proposed rule, EPA noted that processed scrap metal is separated, melted or otherwise processed to add value or improve handling qualities. 61 Fed. Reg. at 2,362. Companies that generate skims and drosses may recover the metal content from these byproducts on site or send them off-site to facilities which are specifically designed to process these materials for recovery. Skims and drosses are melted and[agglomerated, operations that are recognized as suitable processing. 61 Fed. Reg. at. 2362. Indeed, these types of processing helped clear the way for EPA's proposed treatment of scrap metal. Id. at 2,371 (proposed 40 C. F. R. _26 1. 1 (c)(9)). 2.Aluminum By-products Are Valuable Commodities The more valuable a material is after initial processing, the more likely it is to be commodity-like. 50 Fed. Reg. at 655. Like scrap metal, skim.,; and drosses are traded nationally and internationally in

established markets for positive economic value. These byproducts are traded, as any other commodity, under sale or tolling contracts. The recoverable metallic content is systematically tested and serves is the basis for pricing. As aluminum is sold as a commodity with prices based on the London Metal Exchange, many producers purchase scrap including aluminum by-products as a raw material because it is less expensive than primary aluminum. 3. Aluminum By-products Are Very Similar to - Raw MATERIALS Used in Aluminum Production, and in Fact, Are Often Used as Raw MATERIALS in Aluminum Processes Under EPA policy, if the initially-reclaimed material can substitute for a virgin material,, for instance as feedstock, it is more likely to be commodity-like. 50 Fed. Reg. at 655. Skims and drosses comprise a significant portion of the current aluminum market, and are accepted as raw materials by the secondary aluminum processing or aluminum recycling industry. By-products are used in lieu of virgin metal because of their comparable performance and substantial cost savings. Recycling of aluminum skims and drosses is very common, and economically feasible with metal content as low as 8 percent. Depending on the material and processes employed, recovery rates may range up to 60 percent and higher.

The Aluminum Association urges EPA to extend the exclusion for scrap metals to skims and drosses, aluminum processing by-products that have commodity-like characteristics similar to scrap metal. Aluminum skims and drosses are valuable materials and are , considered an important metal source by the aluminum industry. Because these by-products contain fully recoverable metal, they are not discarded or landfilled.

Skims and drosses are by-products generated as part of the aluminum melting process. Whenever molten aluminum is exposed to the atmosphere, a thin layer of aluminum oxide forms on its surface. Scrap aluminum being melted is coated with aluminum oxide. This oxide material is the starting point for by-products derived from melting aluminum. The oxide layer increases during stirring, transferring, fluxing or pouring operations, and floats to the surface of the molten aluminum. It builds up in troughs, furnaces, and crucibles during the casting process, and free aluminum becomes mixed and entrapped with the oxide. "Dross," in this context, refers to a solidified material generally consisting of oxides of aluminum and other alloying -materials such as magnesium, formed when molten aluminum reacts with the atmosphere or moisture. The

term "skim" connotes an accumulation of oxide with entrapped metal, formed on the metal surface after melting from oxide films introduced as surface oxides on all charge components. Skims and drosses are currently categorized by EPA as "characteristic by-products", along with a variety of by-product materials generated by chemical and manufacturing industries. When reclaimed, all characteristic by-products are exempt from the definition of a solid waste under 40 C. F. R. 261.2. That the current broad "characteristic by-product" category captures skims and drosses evidences the category's failure to recognize the differences in environmental risk and recycling rates that exists for aluminum skims and drosses as opposed to other byproducts. Similar to scrap metal, and unlike many other by-product materials, aluminum skims and drosses are "commodity-like," posing little environmental risk, high intrinsic value, and are recycled at higher rates. Companies that generate skims and drosses may recover the metal content from these byproducts on site or send them off-site to facilities which are specifically designed to process these materials for recovery. Skims and drosses are melted and agglomerated, operations that are recognized as suitable processing. 61 Fed. Reg. at 2362. Recycling of aluminum skims and drosses is very common, and economically feasible with metal content as low as 8 percent. Depending on the material and processes employed, recovery rates may range up to 60 percent and higher. 4.1 Guaranteed End-markets Exist for Skims and Drosses at Domestic and International Smelters, Mills and Foundries Again, skims and drosses are commodity-like because, in. fulfillment of EPA criteria, there are existing and guaranteed end-markets for the initially-reclaimed material. 50 Fed. Reg. at 655. In 1994, the US aluminum industry generated approximately 970 million pounds of skims and drosses. Approximately 177 million pounds were reclaimed on site, while an estimated 773 million pounds went off-site for reclamation. On a facility-specific basis, one company processed 170 million pounds of aluminum by-products which it generated, sending other volumes off-site for further processing to companies which toll or specialize in aluminum by-product recovery. One such recovery facility processed 200 million pounds of by-products, at an average recovery rate of 60 percent. The facility then returned the recovered metal to its customers. The commodity-like nature of skims and drosses is also evidenced in a healthy import/export market. The U.S. exports approximately

10.4 million pounds of aluminum by-products annually, while aluminum companies import 30 million pounds of aluminum byproducts per year. As a result of the lower capital and operating costs of using scrap metal and aluminum by-products, versus virgin material, the import/export market is expected to continue to grow. 5. Aluminum By-products Are Managed To Minimize Loss and Release to the Environment Like scrap metal, skims and drosses are processed to minimize loss and to maximize recoveries of aluminum metal, again satisfying EPA's criteria for characterizing a material as commodity-like because of the care with which it is handled. 50 Fed. Reg. at 655. Because the industry treats these materials as commodities, it strives to recover all the metal content feasibly recovered from aluminum by-products. While economic incentives ensure that the potential for releases to the environment of these materials is low, recyclers also practice responsible and environmentally safe operating procedures. Processors prevent losses to the environment for the most part by keeping the material covered and dry, forestalling any potential losses due to potential reactivity with water. Furthermore, there has been an absence of damage incidents attributable to skims and drosses.
The Aluminum Association recommends
that EPA to adopt the Institute for Scrap Recycling's suggested rule language regarding metal-bearing by.-products, which states: 261.4 Exclusions (a)(17) Metal-bearing
by-products from secondary materials processes that are being reclaimed. The Association cites the discussion above regarding the commodity-like nature of skims and drosses as compelling evidence that, as least regarding these aluminum by-products, the suggested exclusion is justified.

The Aluminum Association supports EPA's decision to exclude processed scrap metal being reclaimed from the definition of a solid waste under RCRA. EPA based this determination on an examination of factors showing the commodity-like nature of processed scrap. Because the aluminum by-products skims and drosses also pass this test, the exclusion should be extended to these by-products as well. For similar reasons, the Association supports ISRI's position that the scrap metal exclusion should also apply to unprocessed scrap that has been removed from the solid waste stream so it may be recycled. For similar reasons, the Association supports ISRI's position that the scrap metal exclusion should also apply to unprocessed scrap that has been removed from the solid waste stream so it may be recycled.

RESPONSE:

Currently, by-products exhibiting a characteristic of hazardous waste are excluded from the definition of solid waste when reclaimed (40 CFR §261.2). Usually, metal-bearing by-product materials generated during secondary materials processing, such as slags, drosses, skimmings, and sludges, retain the current exclusion from the definition of solid waste when reclaimed. The commenter asserts that skims and drosses have low environmental risk, possess high intrinsic value, and are recycled at high rates, therefore appearing to be similar to scrap metal. Therefore, the commenter recommends that these materials be distinguished from other by-products by providing a separate exclusion under 40 CFR Part 261.4(a) for metal bearing by-products when reclaimed. At this time, the Agency is in the process of addressing regulation of by-product materials as part of a separate rulemaking on the Definition of Solid Waste. Finalizing the commenter's recommended revision to the definition of solid waste for metal-bearing by-products is beyond the scope of this rulemaking and is more appropriately addressed in the context of the Definition of Solid Waste rulemaking. The exclusion from the definition of solid waste for metal-bearing by-product materials will remain part of the broader exclusion for by-products exhibiting a characteristic of hazardous waste when reclaimed.

DCN PH4A080
COMMENTER Molten Metal Technology
RESPONDER RE
SUBJECT SCRP
SUBJNUM 080
COMMENT MMT supports both of these proposed exclusions. In certain applications, MMT's Catalytic Extraction Process (CEP) produces a processed metal product from metal-bearing secondary materials. We have historically been able to sell this product produced at our Fall River Facility to s metal brokers at a price of $50-100 per ton. We expect metal product from our commercial operations to be considerably more valuable. In any event, we believe the Agency's reasoning in developing the proposed exclusion is sound: this material has a relatively high value that minimizes the chance of or incentives for mismanagement, there are well established markets for the product, and it is a benign material not associated with environmental insults. MMT is actively exploring the potential for using CEP to recover valuable products from circuit boards. The State of California's Department of Toxic Substances Control (DISC.) is currently evaluating CEP performance data for processing such material under the auspices of the DISC.'s Technology Certification Program. We agree- with the Agency's rationale for proposing to exclude shredded circuit boards from the definition of solid waste. In this case, the Agency has proposed a conditional exclusion for shredded circuit boards destined for metal recovery based on management of the shredded circuit boards in containers. We agree that such materials are managed more like materials in commerce than wastes. MMT also urges EPA to recognize and understand the broad principles underlying these specific proposed exclusions, i.e., that it is possible and desirable to develop exclusions from the definition of solid[waste based on the commodity-like nature of certain materials (e.g., processed. scrap metal) and/or the management of the material (e.g., shredded circuit boards in containers destined for recycling). We note the Agency has also opted this approach elsewhere in this proposal, and in other recent rulemaking proposals (e.g., contingent management options for recycling in the petroleum rule, conditional exclusion for product-like synthesis gas in the MACT rule for combustors). We believe the opportunities for this kind of creative encouragement of environmentally sound recycling are virtually unlimited, and urge the Agency to work to identify and implement

such opportunities in all its rulemaking activities.

RESPONSE:

The Agency thanks the commenter for supporting the exclusions from the definition of solid waste for excluded scrap metal and shredded circuit boards.

DCN PH4A082
COMMENTER Horsehead Resource Development
RESPONDER RE
SUBJECT SCRP
SUBJNUM 082
COMMENT HRD supports the exclusion of processed scrap metal from the definition of solid waste.

RESPONSE:

The Agency thanks the commenter for supporting the exclusion from the definition of solid waste for excluded scrap metal. In today's final rule, the Agency has expanded the scope of the exclusion to include home scrap metal (e.g., turnings, cuttings, punchings, and borings generated by steel mills, foundries, and refineries) and prompt scrap metal (e.g., turnings, cuttings, punchings, and borings generated by the metal working/fabrication industries).

DCN PH4A083
COMMENTER Electronics Industries Assn
RESPONDER RE
SUBJECT SCRP
SUBJNUM 083
COMMENT EIA's comments do not address the entire proposal, but instead are confined to the matters addressed in "Part Two: Other RCRA Issues." Specifically, we express our support for the proposal by the U.S. Environmental Protection Agency ("EPA" or "the Agency") to revise the regulatory definition of "solid waste" to exclude processed scrap metal and shredded circuit boards. We also suggest a number of ways in which the proposal could be improved.

RESPONSE:

The Agency thanks the commenter for supporting the exclusions from the definition of solid waste for excluded scrap metal and shredded circuit boards.

DCN PH4A083
COMMENTER Electronics Industries As
RESPONDER RE
SUBJECT SCRP
SUBJNUM 083
COMMENT EIA Supports the Proposed Revisions to the Definition of "Solid Waste" Our members are interested in the current proposal because of its potentially beneficial impact on the cutting-edge product return, disassembly, and recycling programs developed in the electronics industry. EIA members have devised innovative means of designing products to facilitate their re-use, refurbishment, and recycling. Many of these programs, however, are impeded by the operation of EPA regulations. Some companies are discouraged from recycling electronic products and components because of the regulatory uncertainty surrounding aspects of these programs. For example, the Agency's regulations are unclear concerning whether these products are classified as "waste" and whether product disassembly programs are subject to regulation. As a result, some companies are deterred from implementing and/or expanding these programs because of the uncertainty as to whether they must comply with the burdensome reporting and record keeping, permit, and other requirements associated with the management of solid and hazardous waste. For this reason, we applaud the initiative of the Agency to propose to modify the definition of "solid waste" under the Agency's regulations promulgated pursuant to the Resource Conservation and Recovery Act (RCRA) to exclude processed scrap metal and shredded circuit boards. Metal and circuit boards are common elements of electronic products, and excluding these items from RCRA jurisdiction will likely advance the Agency's and the industry's common goals in encouraging the recycling of electronic products. The proposal will facilitate sound recycling practices, and thus further a key goal of RCRA: to promote the protection of health and the environment and to conserve valuable material and energy resources by ... (6) minimizing the generation of hazardous waste and the land disposal of hazardous waste by encouraging process substitution, materials recovery, properly conducted recycling and reuse, and treatment. " RCRA section 1003 (a)(6), 42 U. S. C. section 6902(a)(6). We fully agree with the Agency that processed scrap metal and shredded circuit boards are more "commodity-like" than "waste-like," and that these items have not contributed to the solid waste disposal problem. Unlike other materials, used

electronic products are not necessarily "waste" when they are removed from service by a particular customer. These items may be re-used in their entirety, or components or parts can be re-used, rebuilt, or recycled, and therefore these products are potentially valuable commodities with a strong market for these materials. Their value results in their handling in a manner that is protective of the environment. The Agency states that it reached this conclusion based on a review of the literature, databases, and consultation with the Bureau of Mines, and therefore it appears that their is ample support in the record to justify this conclusion. EIA would be happy to provide EPA with additional information if the Agency finds it necessary. While we fully support the Agency's proposal, we believe that the final rule should be improved in a number of respects, and we add the following comments.

RESPONSE

The Agency thanks the commenter for supporting the exclusions from the definition of solid waste for excluded scrap metal and shredded circuit boards.

DCN PH4A083
COMMENTER Electronics Industries As
RESPONDER RE
SUBJECT SCRP
SUBJNUM 083
COMMENT Processed Scrap Metal EIA supports the Agency's proposal to exclude processed scrap metal from the definition of solid waste. We believe that this approach will provide greater regulatory certainty and remove some regulatory burden, thereby facilitating the recycling of scrap metal. Nonetheless, we suggest the following revisions to the portion of the proposal applicable to scrap metal. A. The Regulatory Exclusion Should Extend to Unprocessed Scrap Metal Being Sent to a Recycling Facility, Not Only Scrap Metal Already Processed by a Recycler The Agency's proposal "is restricted to scrap metal which has been processed by scrap metal recyclers to be traded on recycling markets for further reprocessing into metal end products." 61 Fed. Reg. at 2361. This restriction unduly narrows the application and benefit of the proposal. The logic of excluding scrap metal processed by a recycler should also extend to scrap metal being sent to a recycler. After all, both materials are defined for recycling and are managed as such. As the court stated in American Mining Congress,, v. EPA, 824 F.2d 1177, 1 190 (D.C. Cir. 1987), "EPA's authority [extends] only to materials that are truly discarded, disposed of, thrown away, or abandoned." Scrap metal from electronic products destined for recycling should be excluded from the definition of solid waste because such materials are potentially valuable commodities that are not "discarded, disposed of, thrown away, or abandoned. " This approach also produces anomalous results that make little sense. Under the Agency's approach, material sent to a scrap recycler is a RCRA-exempt solid waste, and the scrap recycler subjects it to processing that transforms it into a material that is not a solid waste. The reasons why such a distinction is necessary or appropriate are unclear, and it is also unclear how this regulatory transformation occurs. The Agency states that "materials generated from the recycling of unprocessed scrap were mismanaged and have historically contributed to the waste management problem," such as batteries, ash, and other residuals. 61 Fed. Reg. at 2362. Simply because materials generated from the recycling of scrap, such as ash and residuals, may be classified as a solid waste does not necessarily mean that the unprocessed scrap itself is also a

solid waste. We suggest that EPA revise the proposal to extend the exclusion to all scrap being recycled, regardless whether it has already been processed by a recycler. Because of its physical form, and the manner in which it is handled, unprocessed scrap from electronic products that is destined for recycling poses no risks to human health and the environment. The Agency should reconsider its approach. B. The Exclusion Should Apply to Scrap Metal Being "Recycled" The Agency needs to revise and clarify the regulatory language concerning the exclusion for scrap metal. The preamble to the proposal refers to the exclusion applying to processed scrap metal being "recycled." See, e.g., 61 Fed. Reg. at 2361 ("The Agency proposes to amend the definition of solid waste by excluding processed scrap metal being reacted from RCRA jurisdictions) (emphasis added). The proposed regulatory language, however, refers to processed scrap metal being "reclaimed." See 61 Fed. Reg. at 23 72 (proposed section 261.4(a)(I 3)). EPA should revise the proposed regulatory language to ensure that the final rule makes it clear that the exclusion for scrap metal applies to materials that are "recycled." As EPA is aware, the regulatory definition of the terms "recycled" and "reclaimed" are distinct, with the term "reclaimed" being a subset of the term "recycled." EPA's regulations state that a material is "recycled" if it is "used, reused, or reclaimed." 40 C'.F.R. section 261.2(a)(7). A material is "reclaimed" if it is "processed to recover a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents." 40 C.F.R. section 261.2(a)(4). Thus, under the proposal it is possible that processed scrap metal being recycled by means other than reclamation might be interpreted as falling within the definition of solid waste. To avoid this unintended result, the Agency should revise proposed section 261.4(a)(I 3) to refer to "processed scrap metal being recycled. 111. Shredded Circuit Boards We support EPA's proposal to exclude shredded circuit boards from the definition of solid waste. Furthermore, it is appropriate that the Agency has provided flexibility to industry in determining the manner in which such shredded circuit boards are handled. We believe that the Agency is correct in setting forth a broad performance standard -- the material must be "stored in containers prior to recovery that are sufficient to prevent a release to the environment" -- rather than mandating compliance with precise, inflexible specifications concerning the handling of shredded

circuit boards. The Agency, however, should go further with regard to used whole circuit boards. Under the proposal, the Agency announces that it will revise the definition of solid waste as applied to shredded circuit boards, but that used whole circuit boards will retain its existing regulatory status as exempt (but not excluded) scrap metal. See 61 Fed. Reg. at 2363. As the basis for this approach, EPA refers to a 1992 guidance memorandum -- an apparent reference to the Memorandum of Sylvia K. Lowrance, Office of Solid Waste, "Regulatory Status of Printed Circuit Boards" (Aug. 26, 1992). EPA should use this opportunity to clarify the regulatory status of used whole circuit boards and thereby promote the sound recycling of these materials. At minimum, the Agency should formalize the current interpretation expressed in the 1992 Lowrance memorandum. EPA guidance memoranda are constantly subject to reinterpretation and possible revision, but a regulation would provide further clarity and certainty concerning this issue. Accordingly, the final rule should include regulatory language specifying that used whole circuit boards are included within the meaning of scrap metal for purposes of the exemption from regulation as hazardous waste. The Agency should also specify that used whole circuit boards destined for recycling are excluded from the definition of solid waste as scrap metal being recycled. As stated above, scrap metal destined for recycling should not be considered as "solid waste," and used whole circuit boards (as a type of scrap metal) should also receive the benefit of that exclusion. It makes little sense to classify shredded circuit boards as an excluded non-waste while subjecting used whole circuit boards to an exempt solid waste status.

RESPONSE:

The commenter raised several different issues in this comment: the role of scrap metal recyclers in the exclusion; the possibility of excluding unprocessed scrap metal from the definition of solid waste; the use of the term “recycled” rather than “reclaimed” in the text of the exclusions; and a request for clarification of the regulatory status of whole circuit boards.

In regard to EPA’s use of the term “scrap metal recycler” in the proposed rule, the Agency agrees with the commenter that the language in the preamble could lead to the conclusion that scrap metal does not qualify for the exclusion until it is processed by a scrap metal recycler. The language in the proposal was not intended to limit the exclusion in this way. In today’s final rule, the Agency clarifies that the exclusion for processed scrap metal being recycled applies to scrap metal that has undergone a processing step (as defined in the preamble to the proposed rule) regardless of who does the processing. In other words, a processing step may be performed by

the generator, an intermediate scrap handler (e.g., broker, scrap processor), or a scrap recycler. Once the scrap metal has undergone a processing step, it may qualify for the exclusion for excluded scrap metal.

The commenter also suggested that the Agency expand the exclusion from the definition of solid waste for scrap metal to include unprocessed scrap metal. The commenter asserts that the five factors that EPA used to evaluate whether processed scrap metal is commodity-like under 40 CFR §260.31 apply equally to unprocessed scrap metal being recycled. In response to information provided by commenters, EPA identified and studied three different types of unprocessed scrap metal to determine whether the scope of the exclusion should be expanded: home scrap metal, prompt scrap metal and obsolete scrap metal. Home scrap is scrap metal generated by steel mills, foundries, and refineries such as turnings, cuttings, punchings, and borings. Prompt scrap, also known as industrial or new scrap metal, is generated by the metal working/fabrication industries and includes such scrap metal as turnings, cuttings, punchings, and borings. Obsolete scrap metal is composed of worn out metal or a metal product that has outlived it original use, such as automobile hulks, railroad cars, aluminum beverage cans, steel beams from torn down buildings, and household appliances.

The Agency uses five factors when evaluating whether a partially-reclaimed material is "commodity-like" and is not part of the waste management problem and thus is appropriate to exclude the material from RCRA Subtitle C jurisdiction through issuance of a variance (40 CFR §260.31(c)). The five factors are: 1) the degree of processing the material has undergone and the degree of further processing that is required, 2) the value of the material after it has been reclaimed, 3) the degree to which the reclaimed material is like an analogous raw material, 4) the extent to which an end market for the reclaimed material is guaranteed, and 5) the extent to which a material is managed to minimize loss. The Agency applied these five factors to the three categories of unprocessed scrap metal to determine if these categories meet the criteria for “commodity-like” found at 40 CFR §260.31(c).

The Agency evaluated unprocessed home scrap and prompt scrap against each of the five factors and found that these categories of scrap metal are substantially similar to processed scrap metal due to established markets for the material’s utilization, the inherent positive economic value of the material, the physical form of the material, and the absence of damage incidents attributable to the material. based on this analysis, the agency has expanded the scope of the exclusion for scrap metal to include both unprocessed home and unprocessed prompt scrap metal.

The Agency has not found sufficient data for evaluating unprocessed obsolete scrap metal against the set of factors used to determine if a partially reclaimed material qualifies for a variance from the definition of solid waste. Therefore, the Agency is not expanding the scope of the exclusion from the definition of solid waste to include obsolete scrap metal. Providing an exclusion from the definition of solid waste for obsolete scrap metal at this time would be premature and is better addressed in the Definition of Solid Waste rulemaking, due to be proposed in the near future.

The commenter also raised the issue of using the term “recycled,” instead of “reclaimed” in the language of the excluded scrap metal exclusion. The Agency agrees that the exclusion should have been written with the term “recycled,” and has changed the language in the final rule.

EPA disagrees with the commenter’s assertion that it does not make sense to exclude

shredded boards from the definition of solid waste while leaving whole boards within the definition of solid waste, even though whole boards are exempt from regulation as a hazardous waste. Whole used circuit boards are less commodity-like than shredded circuit boards because whole used boards are harder to assay, more difficult to handle and may contain proprietary information of generator and manufacturers. In addition, EPA notes that since 1992, used whole boards are currently classified as scrap metal and therefore when recycled are completely exempt from RCRA regulatory requirements. Therefore, no RCRA regulatory requirements such as manifesting, export or storage permit requirements currently operate as disincentives to environmentally sound recycling of these materials. The exclusion from RCRA jurisdiction for used shredded circuit boards is necessary only because they do not qualify for the definition of scrap metal and thus may be subject to RCRA regulatory requirements that may serve as disincentives to their recovery. EPA also believes that because whole used circuit boards are classified as scrap metal, that excluding whole used boards from the definition of solid waste is not necessary to ensure environmentally sound recovery of these materials and would be confusing to the Agency's current definition of scrap metal.

DCN PH4AL05
COMMENTER Association of Battery Recyclers
RESPONDER RE
SUBJECT SCRP
SUBJNUM
COMMENT EPA has proposed to exclude "processed scrap metal" from the RCRA definition of solid waste. The ABR understands from EPA's preamble discussion of this issue that the proposed term "processed scrap metal" would not include batteries, spent acids, and process secondary materials such as slags and drosses and would not include any "distinct components separated from unprocessed or partially processed scrap metal that would not otherwise meet the current definition of scrap metal. Historically, the Agency has excluded the foregoing materials from the regulatory definition of "scrap metal." The ABR understands that EPA has defined the term "processed scrap metal" as a subset of scrap metal. In other words, materials that would not be considered "scrap metal," as that term currently is interpreted by EPA, would likewise not be considered "processed scrap metal." Based on the foregoing, the ABR interprets the proposed definition of "processed scrap metal" to specifically exclude spent lead acid batteries, battery components, and any lead bearing materials generated by the separation (e.g., breaking), reclamation and/or recycling of spent or off-speculation lead-acid batteries and other lead-bearing materials. The definition also would exclude any process secondary materials generated by the lead reclamation and/or recycling process. Accordingly, any of the above materials that currently are regulated as "solid waste" under RCRA, would continue to be so regulated. Assuming that the above interpretation of EPA's proposal is accurate, the ABR has no objection to excluding "processed scrap metal" from the definition of solid waste. However, to the extent that the proposal purports to expand the definition of "scrap metal" to include materials not currently encompassed by that definition, such intent is not apparent and the proposed rule does not afford adequate notice or opportunity for comment.

RESPONSE:

The commenter requests clarification that scrap metal that contains components such as batteries or mercury switches, which do not meet the current definition of scrap metal, also do not meet the definition of processed scrap metal in the proposal. In the preamble to the proposal, the