

25 June 2007

OSWER Docket, EPA Docket Center
Mail Code 5305T
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

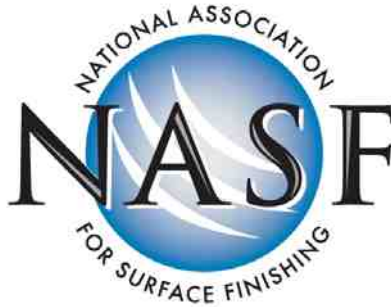
RE: Proposed Revisions to the Definition of Solid Waste
Docket ID No. EPA-HQ-RCRA-2002-0031

Dear Sir or Madam:

Enclosed please find comments submitted on behalf of the National Association for Surface Finishing (NASF) in response to EPA's proposed revisions to the definition of solid waste under the Resource Conservation and Recovery Act (RCRA). 72 Fed.Reg. 14172 (March 26, 2007). If you have any questions, would like additional information, or would like to discuss these comments, please contact Jeff Hannapel of The Policy Group by telephone at 202 457-0630 or by email at jhannapel@thepolicygroup.com.

Respectfully submitted,

Jeffery S. Hannapel
The Policy Group
On Behalf of NASF



June 25, 2007

**Comments on EPA's Proposed Revisions to the
Definition of Solid Waste, 72 Fed. Reg. 14172 (March 26, 2007)
Docket ID No. EPA-HQ-RCRA-2002-0031**

These comments are submitted on behalf of the National Association for Surface Finishing (NASF), formerly the Surface Finishing Industry Council ("SFIC"), which included the National Association of Metal Finishers (NAMF), the American Electroplaters and Surface Finishers Society, Inc. (AESF) and the Metal Finishing Suppliers' Association (MFSA) in response to EPA's proposed revisions to the definition of solid waste under the Resource Conservation and Recovery Act (RCRA) that was published in the Federal Register on March 26, 2007. 72 Fed.Reg. 14172.

I. Summary of the Surface Finishing Industry

The NASF has over 3,000 members that include metal finishing companies, metal finishing suppliers, and individual and professional members. The NASF represents the business, management, technical and educational programs as well as the regulatory and legislative advocacy interests of the surface finishing industry to promote the advancement of the North American surface finishing industry globally. The revisions to the definition of solid waste can facilitate the recovery of vital metal resources and provide a needed boost to the finishing industry – along with the major manufacturing

supply chains it serves – as it strives to remain competitive in global manufacturing markets.

The surface finishing industry plays a vital role in the lives of consumers and in the nation's economic future. The industry's role in corrosion protection alone provides an estimated \$200 billion annual economic benefit to the nation. Surface finishing ensures that the products people use every day last longer, work better and look better.

Everyone relies on surface finishing, whether they realize it or not - to maximize their productivity, their safety and their quality of life. Surface finishing is the process of coating, usually a metal or plastic object, with one or more layers of another metal, paint or plastic to furnish its surface with desired properties, such as: corrosion, abrasion and wear resistance, improved lubrication, non-toxicity, altered dimensions, light reflection, insulation or conductivity, improved electrical properties, solderability, heat and cold resistance, and improved appearance. The many industries that rely on metal finishing include: automotive, industrial equipment, computers and electronics, medical equipment, aerospace and defense, tools and dies, shipbuilding, petroleum, furniture, steel mill products, jewelry, plumbing fixtures, household appliances, and construction.

Metal finishing operations are performed in two ways: 1) as a "captive" operation or department of a manufacturing company; and 2) on a job-shop basis where the work is performed under contract for the owner of the product or material that is to be finished. Although many manufacturers continue to operate metal finishing departments, the increasing trend is to subcontract this work to independent firms. This trend is a result of the high operating costs and a realization that metal finishing is both a regulatory and process specialty.

Over 80 percent of the job-shops in business employ fewer than 75 people, while nearly 40 percent employ fewer than 20 people. Most job-shop surface finishing firms are family-owned businesses, located in urban areas, with a large percentage of minority employees. Median annual sales for job shops are approximately \$1.6 million.

The industry is subject to very high costs for environmental, health and safety compliance. Roughly 7.5 percent of total payroll is spent on regulatory-related employees, and these employees cost on average over 20 percent more than other personnel. In the early 1990s, plating operations spent nearly 28 percent of their total capital expenditures on pollution prevention and regulatory controls. Further, in 1998, total compliance operating costs for an average job shop were 6.5 percent of sales, or nearly \$200,000 for a company with a sales volume of \$3 million.

II. Secondary Materials Generated by the Surface Finishing Industry

The surface finishing industry generates two primary categories of secondary materials that are amenable to recycling: electroplating waste water treatment sludge and ion exchange canisters. The industry generates other secondary materials that can be recycled, but these comments will focus primarily on these two materials. The proposed revisions could positively impact the recycling of both of these materials.

Prior to proposing these revisions to the definition of solid waste, EPA was working on a separate rulemaking to facilitate the recycling of electroplating sludge and ion exchange canisters. The issues that were addressed in that effort are now being addressed as part of this rulemaking and the broader definition of solid waste. Provided below is a brief discussion of these two secondary materials generated by the surface finishing industry.

A. Electroplating Waste Water Treat Sludge

Metal finishing operations are predominately water-based processes that include rinses containing metal compounds from the plating solutions. To meet applicable water effluent limits, facilities must treat these rinse waters to remove metals prior to discharge. Generally, the metals are removed through a chemical precipitation process that generates a metal-bearing sludge. The sludge is collected and passed through a filter press and is

often dried to remove some of the remaining moisture. The resulting sludge is currently defined under the RCRA regulations as the listed hazardous waste, F006.

Originally, electroplating sludge was listed as a hazardous waste in 1980 because it contained the metals: chromium, cadmium and nickel, as well as complex cyanide compounds. The same metals that make the sludge hazardous are the materials that make it a valuable secondary material for recycling. The levels of metals in the sludge vary depending on the metal finishing processes that are conducted at the facility. For example, a facility that runs mostly nickel plating would have higher levels of nickel in the sludge. Many facilities, however, run numerous metal plating processes so the levels of metals in the sludge vary considerable from facility to facility.

With respect to the cyanide compounds, the metal finishing industry has undergone substantial changes in the 27 years since F006 was listed. Many cyanide plating processes have been replaced with other types of metal plating processes. In addition, the RCRA land disposal restrictions set a leachable limit of 590 mg/L for cyanide. Because most electroplating sludge currently is land disposed, the electroplating sludge generated today have cyanide concentrations less than 590 mg/L.

A sludge that meets the land disposal restriction limit invariably contains cyanide that is complexed with iron. EPA has concluded that iron cyanide compounds (*e.g.*, common ingredients in road salts used to melt snow and ice) do not present a hazard to human health or the environment. In a May 1999 article published in the finishing industry's trade magazine, *Plating and Surface Finishing*, John Lindstedt of Artistic Plating Company in Milwaukee, Wisconsin summarized the status of electroplating sludge 20 years after the listing and several EPA research projects that were focused on the specific types and amounts of the metal and cyanide compounds in electroplating sludge.

Despite the fact that electroplating sludge contains valuable metals that could be recovered, most sludge is currently disposed in hazardous waste landfills. Disposal tends to be less expensive than recycling because:

- 1) there are more permitted hazardous waste landfills than recycling facilities that can receive electroplating sludge;
- 2) landfills are generally located closer to generators than recycling facilities so the transportation costs are less;
- 3) regulatory compliance costs are high for sending materials to a recycling facility; and
- 4) the application of the so-called “mixture and derived-from rule” discourages the recycling of listed hazardous waste such as F006 because the residues from recycling listed hazardous waste are automatically considered a listed hazardous waste.

The industry estimates that approximately 20 to 30 percent of electroplating sludge is currently being recycled. Additional amounts of the sludge would be recycled if regulatory barriers were removed and compliance costs were lower for recycling as compared to disposal. Removal of the regulatory barriers to recycling such as no longer applying the “mixture and derived-from rule” to recycling residues could also open additional recycling markets. The proposed revisions to the definition of solid waste could facilitate more recycling of electroplating sludge by removing some of the regulatory barriers associated with recycling.

B. Ion Exchange Canisters

Some metal finishing facilities also use ion exchange technology to remove metals and other impurities from waste water. Use of ion exchange canisters can allow facilities to meet applicable water effluent limits, or in many cases, to reuse the treated water at the facility. Ion exchange canisters contain resins designed to attract certain metals. As waste water is passed through the ion exchange columns, the metal

compounds adhere to the resins. The metals can be removed from the resins through a regeneration process. This regeneration process can occur on site by the generator, but it is most commonly performed off site at an ion exchange regeneration and metals recovery facility.

Under the current RCRA regulations, ion exchange canisters used at metal finishing facilities must be managed as the listed hazardous waste, F006, even when they are recycled through the regeneration and metal recovery process. The potential risks posed by ion exchange canisters are minimal because the canister is an enclosed system. The waste water to be treated enters and exits the canister through pressure valves. Similarly, the resins are regenerated by flushing acids through the same valves into the canister to recover the metals in solution. To access the resins for replacement, operators would have to dismantle the canister.

Transporting ion exchange canisters would also pose minimal risk because the canisters are made of strong impenetrable materials such as metal, reinforced fiberglass and other composite materials. In addition, the materials inside the canisters are not likely to be spilled or otherwise released.

Ion exchange technology is an innovative pollution prevention practice that allows for the recovery of valuable metal resources. Ion exchange canisters regenerated on site or sent off site for regeneration are clearly not discarded and should not be subject to the hazardous waste regulations, provided generators meet the conditions and requirements for managing and recycling the metals consistent with the proposed revisions to the definition of solid waste.

III. Proposed Revisions Are Needed Now More Than Ever

Under the existing regulatory framework for hazardous secondary materials, the industry is literally throwing away valuable metals. What makes electroplating sludge

“hazardous” in the eyes of EPA is the very metal that makes it valuable when it is recovered. In short, the sludge is only “hazardous” if it is *not recycled*.

The vast majority of electroplating sludge is *NOT* recycled, in part, because of the high costs associated with managing it as a hazardous waste. Under RCRA and the so-called “mixture and derived from” rule, any residue from the treatment or recycling of a listed hazardous waste like F006 must be managed as a hazardous waste. Because of this, recycling facilities either refuse to accept electroplating sludge or impose high costs to process it. In most instances, it is simply cheaper to send electroplating sludge to local hazardous waste landfills where it is treated by stabilization or encapsulating it in cement, sometimes doubling or tripling the volume of the material prior to disposal.

The average metal finishing firm “throws away” over \$50,000 annually in metals based on current pricing trends. The nation can ill-afford such waste of valuable resources, particularly in the current time period with historically high metals prices and scrap metal shortages. Metals prices have risen dramatically, substantially outpacing the increasing costs of health insurance, workers compensation, energy and regulatory compliance. For example, the following metals prices have dramatically increased since 2004:

- nickel has increased from \$5.79/pound to \$ 24.70/pound – an increase of over 300 percent;
- zinc has increased from \$0.45/pound to \$1.85/pound – an increase of over 300 percent; and
- silver has increased from \$6.83/troy ounce to \$13.50/troy ounce – an increase of approximately 100 percent.

The expanding demand for metals such as nickel in China and other Asian countries to support their burgeoning manufacturing sectors has decreased the worldwide supply and has substantially elevated the price of metals. Similarly, the struggling U.S. manufacturing base is not generating enough scrap metal to feed our own domestic needs.

It is the classic economic model of increasing worldwide demand for metals with decreasing supplies driving the price of metals higher and higher.

For several reasons, appropriate regulatory incentives to recover metal resources from materials like electroplating sludge are needed now more than ever. First, the historically high metal prices, together with the worldwide shortage of scrap metal supplies, are sharply increasing the costs of metal raw materials and plating solutions for metal finishing companies. These added costs are potentially devastating because the industry is already experiencing unprecedented operating costs with rising energy, health insurance, general liability insurance, workers compensation and regulatory costs.

These increased costs cannot all be passed on to customers. Without some efforts to facilitate recycling and reduce compliance costs, U.S. facilities will be less competitive globally, particularly with respect to other countries that already have cost advantages in other areas such as labor and benefits, tort liability, energy, and regulatory compliance.

Second, as responsible stewards of our environment and natural resources, the nation needs to recover valuable resources from metal-laden materials like electroplating sludge and to limit the use of our landfill space for truly waste-like materials that have little or no value. In addition, nickel and chromium are strategic metals for national defense for which the U.S. has no reserves. It simply does not make sense for a metal finishing firm to throw away thousands of dollars of critical metals each year.

Third, the rule would reduce the average metal finishing facility's operating costs by over \$50,000 each year in reduced transportation costs and waste management fees. Such substantial savings for a small business in one area would help facility owners continue employing workers that support families, reinvest in other cost-containment and revenue generating strategies for the company, and remain viable in the "cost-price squeeze" facing U.S. manufacturing and key supplier industries like metal finishing in highly competitive global markets.

U.S. manufacturing is good for the nation's economy. *Recycling makes sense and is good for U.S. manufacturing.* New regulations that remove existing regulatory barriers, encourage the recovery and beneficial reuse of valuable resources like metals and promote U.S. manufacturing are needed -- and needed now more than ever.

IV. Specific Provisions of EPA's Proposal

The proposed new definition of solid waste could facilitate more recycling of electroplating sludge. Under the proposal, sludge that is reclaimed for metals recovery would not be considered "discarded" for regulatory purposes and would not, therefore, be subject to hazardous waste regulations, provided that the generators and reclaimers met a set of conditions regarding the management and recycling of the sludge. The surface finishing industry generally supports this proposal and submits comments on the specific provisions of the proposal below.

A. Materials Reclaimed While Under the Control of the Generator

The industry agrees with the proposal that the secondary materials are not considered discarded and are excluded from the definition of solid waste if they are: 1) reclaimed onsite at the same facility that generated the material; 2) reclaimed by the same company that generated the material; and 3) reclaimed off site pursuant to an agreement whereby the generator retains ownership of, and responsibility for, the material. By requiring such materials to remain under the control of the generator, this exclusion would facilitate more recycling and provide adequate safeguards to protect human health and the environment through the recycling process (as EPA research confirms). Generators recognize the value of secondary materials and will manage these materials as valuable materials to prevent releases in order to get the most value from them through the recycling process.

B. Exclusion Conditions for Generators Transferring Materials to Another Facility for Reclamation

For secondary materials transferred to another facility for reclamation, generators and reclaimers must meet a set of conditions for the materials to be excluded from the definition of solid waste. Two of these conditions for generators are discussed below.

1. Secondary Materials Must Be Transferred Directly to a Reclaimer

The proposal provides that hazardous secondary materials must be transferred directly to a reclamation facility and not through a “middleman.” Materials that require more than one reclamation step are, however, eligible for the conditional exclusion. Specifically, EPA stated that electroplating sludge is often dried and blended at a facility before it is amenable to a final reclamation process such as metals smelting. Under this example, the drying and blending of the sludge is one reclamation step and the smelting or metals recovery is another reclamation step. The surface finishing industry agrees that the two-step reclamation process should meet this condition of the exclusion.

Similarly, the flushing of metals from ion exchange resins is one reclamation step and the recovery of metals from the flushed material is another reclamation step. Accordingly, the reclamation of ion exchange canisters should also be eligible for the conditional exclusion.

The NASF also asks EPA to consider another scenario common with electroplating sludge as eligible for this conditional exclusion. Many metal finishing facilities are small businesses that generate relatively small amounts of electroplating sludge. Often it is difficult to transport these small amounts to a blender or a smelter because of the proportionally higher costs of transporting the material. In addition, blenders and smelters often do not want to handle small amounts of the sludge due to the

relatively high transaction costs associated with such small amounts. Accordingly, this sludge would be disposed in a local hazardous waste landfill.

To facilitate recycling and to achieve the necessary economies of scale, “milk runs” are organized, whereby a single truck may collect small amounts of electroplating sludge from several facilities in a local or regional area. With a full truck load, the costs of transportation to the blender or smelter can be more reasonably and appropriately shared among several small generators. The “milk run” scenario can make recycling a viable management option for small facilities that would otherwise land dispose their electroplating sludge.

Accordingly, allowing “milk runs” prior to the blending and smelting to be eligible for the conditional exclusion appears to be consistent with the rationale for materials that require more than one reclamation step.

2. Reasonable Efforts to Ensure the Safe Recycling of Secondary Materials

Requiring generators to make reasonable efforts to ensure that its secondary material will be safely and legitimately recycled is consistent with good business practices, because generators need to know that they are dealing with reputable reclaimers. In addition, making reasonable efforts can also help generators minimize potential Superfund liability under CERCLA. Because this condition makes good business sense, most generators are already making some type of reasonable efforts to ensure that recycling is performed appropriately

Generators should be allowed to use any credible evidence available in making reasonable efforts to ensure that the materials will be safely and legitimately recycled. Where feasible, a site visit and cursory financial evaluation of the reclaimer would also be advisable. Generators would also want to make reasonable efforts to ensure that the reclaimer is meeting its conditions for the exclusion so that the generator can continue to send its secondary materials to the facility for recycling under the exclusion.

A set of questions that must be answered to satisfy the reasonable efforts condition do not need to be part of the regulatory language as EPA suggests, because adequate safeguards are already in place to ensure safe and legitimate recycling. Making the requirement too specific could reduce the flexibility that generators have in meeting this condition and could unnecessarily create new regulatory barriers to recycling and increase regulatory compliance costs. Generators already have sufficient incentive in liability avoidance to ensure that adequate safeguards are in place. To assist generators in meeting this condition, EPA should consider developing some simple, concise guidance on what a reasonable efforts inquiry would be under the new regulation rather than specific regulatory language.

The reasonable efforts condition should not apply if the generator sends its secondary materials to a reclamation facility with a RCRA Part B permit. First, adequate environmental safeguards are in place for the safe management of recycled materials through the permit provisions. Second, it provides reclamation facilities with an incentive to retain or obtain a RCRA Part B permit in order to attract more secondary materials from generators who would not have to meet the reasonable efforts condition. Accordingly, this would reward, not penalize, recycling facilities with permits that already meet the applicable regulatory requirements for the safe management of hazardous waste. Additional recycling markets for facilities without permits would also be encouraged for those generators and reclamation facilities that are willing and able to satisfy the regulatory conditions for the safe and legitimate recycling of secondary materials.

C. Exclusion Conditions for Reclamation Facilities Receiving Materials Generated Off Site

Reclamation facilities must also meet some conditions for managing materials being reclaimed in order to be excluded from the definition of solid waste. NASF's comments on the management of recyclable materials and recycling residues and financial assurance requirements are provided below.

1. Management of Recyclable Secondary Materials

The condition that secondary materials be managed in a manner that is at least protective as that used for analogous raw materials makes sense because the secondary materials are as valuable as the analogous raw materials. Accordingly, reclaimers have a substantial incentive to take appropriate measures to ensure that the valuable materials are not spilled, released or otherwise lost. Reclaimers would also appropriately contain secondary materials without analogous raw materials to prevent releases for the same reasons discussed above.

Furthermore, in the event of a single, isolated release occurrence EPA should not negate the exclusion because of inadequate management practices. Rather, EPA should consider the totality of events and circumstances that led to any such release and what actions have been taken to prevent any further such releases at the reclamation facility.

2. Management of Recycling Residues

Reclamation facilities must manage recycling residues in a manner that is protective of human health and the environment. In many cases, recycling residues can be used as beneficial products, such as slags for road beds and other construction uses. Under the proposal, reclaimed secondary materials are not discarded, and are, therefore, excluded from the definition of solid waste. Accordingly, reclaimed electroplating sludge would not be a listed hazardous waste, so the residue from the recycling the sludge would not be a listed hazardous waste under the “derived-from” rule.

This single change by itself could facilitate more recycling of electroplating sludge because the reclamation facility’s recycling residue would not automatically be regulated as a hazardous waste. Many recycling facilities have in the past expressed interest in electroplating sludge as a feedstock, but have avoided it because of its undesirable regulatory status and the negative impact that it would have on how the

recycling residue had to be managed. Recycling residues should only be subject to hazardous waste regulations if they exhibit one or more characteristics of hazardous waste or are otherwise considered a listed hazardous waste.

3. Financial Assurance Requirement

EPA proposed that reclamation facilities that receive hazardous secondary materials from off-site generators must meet the financial assurance requirements applicable to facilities with RCRA Part B permits, such as closure and post-closure care funds and liability coverage for sudden and accidental occurrences. Reclamation facilities that receive secondary materials from off-site generators should demonstrate some financial assurance, but they should not be held to the same standard as facilities with permits to manage hazardous waste.

Secondary materials being reclaimed are not discarded and are not hazardous waste under EPA's proposal. Reclamation facilities are essentially processing *raw materials* for beneficial use as opposed to RCRA permitted facilities that are treating, storing and disposing *hazardous waste*. In addition, EPA is proposing safeguards on how reclamation facilities must manage secondary raw materials and recycling residues to prevent releases into the environment. Further controls are already in place under the proposal as generators are also required to make reasonable efforts to ensure that reclamation facilities will safely and legitimately recycle the materials and that the facility is financially viable.

Reclamation facilities processing hazardous secondary materials are more analogous to manufacturing facilities using hazardous raw materials than to RCRA hazardous waste permitted facilities. In fact, when considering what constitutes legitimate recycling, EPA compares recycling activities to manufacturing. The same comparison of recycling and manufacturing activities would also be applicable to determine the appropriate level of financial assurance that should be required. The financial assurance requirements for recycling facilities should reflect the relatively lower

risks associated with the manufacturing/recycling activities. Based on the exclusion conditions placed on both generators and reclamation facilities, EPA has provided substantial safeguards to prevent releases from recycling activities.

In addition, generators and reclaimers have a substantial business incentive to manage the valuable secondary raw materials to prevent releases. Keep in mind that what makes electroplating sludge “hazardous” is the very metal that makes it valuable when it is recovered. The same can be said for any manufacturing activity using metal-bearing raw materials. Accordingly, the financial assurance requirement for reclamation facilities under this proposal should reflect the similarities between recycling and manufacturing.

The financial assurance requirement for reclamation facilities should also reflect the real-world risks posed at the facility -- and they do not necessarily have to be the same as that required for RCRA hazardous waste permitted facilities. A financial assurance requirement that is too onerous and unreasonable would represent a potential regulatory barrier to entry for new recycling markets. This could negate the proposal’s efforts to facilitate recycling. A new regulatory definition of solid waste must impose appropriate safeguards to prevent releases of hazardous constituents into the environment, remove unnecessary regulatory barriers, and provide incentives to facilitate and encourage safe and legitimate recycling activities.

D. Enforcement of Exclusion Conditions

The NASF agrees with EPA’s position that a generator’s secondary materials would not be a waste if the reclaimer fails to meet one of the exclusion conditions, provided that the generators has met the applicable conditions, including reasonable efforts. A generator should not be penalized for a reclaimer’s failure to meet the conditions after it received the generator’s secondary materials.

E. Factors for Determining Legitimate Recycling

In this proposal EPA has modified its past approach on identifying criteria to determine if the recycling of hazardous secondary material is legitimate. EPA proposed two legitimacy factors that are mandatory and must be met for the recycled materials to be excluded from the definition of solid waste. In addition, EPA requested comment on how two non-mandatory factors and economic issues should be considered in making legitimacy determinations.

1. Mandatory Legitimacy Factors

EPA proposed that to be legitimate recycling: a) the hazardous secondary material must provide a useful contribution to the recycling process or to the product of the recycling process, and b) the product of the recycling process is valuable. The surface finishing industry generally agrees with these legitimacy factors and contends that the recycling of electroplating sludge and ion exchange canisters for metals recovery would be legitimate recycling. The metals in these materials not only make a useful contribution to the recycling activity, but they *ARE* the product.

In many cases, the metal content of these secondary materials is analogous to virgin metal ores from which the metals are extracted. The metals recovered from these materials are clearly valuable, and as discussed above, are particularly valuable today with historically high metals prices. Even with low metals prices, the metals recovered would be valuable.

Other uses of electroplating sludge have been explored, some as part of EPA's XL Project Program. Depending on the specific applications, beneficial uses of electroplating sludge beyond metals recovery (*e.g.*, feedstock for cement) should also be considered legitimate recycling.

2. Non-Mandatory Legitimacy Factors

EPA proposed two additional legitimacy factors that should be considered in assessing whether the recycling is legitimate: a) how are the secondary materials managed to prevent releases into the environment, and b) whether hazardous constituents are in the product of the recycling activity, which is commonly referred to as “toxics along for the ride.” These factors should not be mandatory in determining legitimacy for the following reasons.

The first factor is not necessary because under the proposed conditional exclusion generators are implicitly required and reclaimers are explicitly required to manage secondary materials to prevent releases into the environment. How these materials are managed says more about the nature of the facility’s operation than it does about the legitimacy of the recycling. EPA has already captured the essence of legitimacy with its two mandatory factors, and this factor adds little and is unnecessary.

The second factor is equally non-determinative in most cases. Many products made both from virgin materials and secondary materials contain impurities that add or detract little from the usefulness of the product. The fact that a product made from recycled materials contains a different amount of impurities than a product made from virgin materials should have little determinative value on legitimacy of the recycling activity. Only in extreme cases with very high levels of impurities would the “toxics along for the ride” pose a problem for the utility or safety of a product. In such extreme cases, however, the recycling may not meet the mandatory legitimacy factors proposed by EPA. For example, too many impurities could diminish the contribution of the secondary material to the recycling process or product, or even the value of the product.

EPA was correct in concluding that these additional legitimacy factors should not be mandatory, because legitimate recycling does not necessarily conform to these factors.

Requiring additional legitimacy factors could unnecessarily discourage legitimate recycling and create new regulatory barriers to recycling.

3. Economic Considerations for Legitimacy

EPA stated in the preamble to the proposed rule that the economics of a recycling activity can be used to determine whether it is legitimate recycling. For example, when the economics of the recycling activity is similar to manufacturing using similar raw materials, then the recycling activity would most likely be legitimate. The economics of recycling is not, however, always similar to manufacturing and must be assessed on its own merits. EPA specifically requested comments on how economics should be considered in determining the legitimacy of recycling.

In essence, all recycling is about economics. One end of the economic spectrum would contend that the fact that recycling occurred is enough evidence that the recycling is legitimate because the economics of the situation dictated it. A generator may decide to recycle secondary materials if it is paid for its secondary materials, pays more than hazardous waste disposal costs to have its secondary materials recycled, or pays less than hazardous waste disposal costs to have its secondary materials recycled. The factors that dictate what a generate pays and how much depends on market forces impacting the product or commodity and the recycling process, and not on the “legitimacy” of the recycling activity. Legitimate recycling may not occur if the economics do not warrant it.

Other more subtle economic considerations may also influence whether a secondary material is recycled. A generator may decide to pay more to have its electroplating sludge recycled rather than disposed for a variety of reasons. For example, a generator may decide to recycle to minimize potential Superfund liability, to help provide needed raw materials for a vital supply chain, or to chose a more environmentally preferable management option based on ethical or societal considerations.

Even though recycling is all about economics, such factors should not be part of any regulatory requirements. The best regulatory framework for recycling would identify proper safeguards and controls to facilitate environmentally protective recycling. It would also remove the regulatory barriers that may discourage recycling. With the appropriate environmental controls in place and the regulatory barriers removed, the regulation should then allow market forces to dictate whether the recycling occur.

Under such a framework, more metals recycling would occur in periods of high metals prices and scrap metal shortages, when it is needed most and the economics of recycling are most favorable. Less recycling would be expected when economic conditions are less favorably. Regardless, the legitimacy of the recycling activity would remain the same under both scenarios. The important thing is that the regulatory requirements should not interfere with these market drivers. The regulation should simply put the appropriate environmental safeguards in place for the recycling activities and minimize the regulatory compliance costs and other potential barriers associated with implementing those controls.

IV. EPA Needs to Encourage States to Adopt Federal Revisions to Facilitate Recycling

As part of its efforts to revise the definition of solid waste to facilitate recycling, EPA must continue to reach out to states and to encourage them to adopt the revisions as soon as practicable. Because most states operate their own RCRA programs, it is imperative that states also adopt any revisions to facilitate recycling. If only a patchwork of states adopt the revisions, efforts to facilitate safe and legitimate recycling through this regulation will be frustrated. EPA should, therefore, provide any and all appropriate assistance and incentives to states to ensure that any new federal revisions to the definition of solid waste are adopted and implemented in each state.

V. Conclusion

EPA's proposal to exclude recycled hazardous secondary materials from the definition of solid waste generally creates a framework that can encourage more recycling. The key to a successful regulatory framework for recycling is to strike the proper balance of mandating appropriate environmental controls on recycling activities, removing regulatory barriers for recycling, and offering effective incentives to recycling activities (*e.g.*, reduced regulatory compliance costs) so that market forces can allow recycling to occur when it is warranted and to flourish in times that it is needed most. The proposed regulation as modified by these comments can strike that balance.

On behalf of the National Association for Surface Finishing (NASF), we appreciate the opportunity to submit these comments on EPA's proposed revisions to the definition of solid waste. If you have any questions, would like additional information, or would like to discuss these comments, please contact Christian Richter (crichter@thepolicygroup.com) or Jeff Hannapel (jhannapel@thepolicygroup.com) of The Policy Group on behalf of the NASF.