EPA Issues Revised Definition of Solid Waste
to Encourage Recycling of Metal-Bearing Materials

On October 30, 2008 EPA issued a new regulation to revise the definition of solid waste to encourage the recycling of more hazardous secondary materials. 73 Fed. Reg. 64668 (2008). The changes to the definition are in response to several court decisions that held EPA’s regulatory definition was overly broad and did not clearly delineate when a material is discarded. Hazardous secondary materials that are legitimately reclaimed are eligible to be exempt from regulation as a hazardous waste under the new rule.

EPA estimates that approximately 5,600 facilities will be impacted by this rule, and it will include 30,000 tons of new recycled materials annually. The rule will provide a cost savings to U.S. facilities of approximately 95 million dollars, and the savings could be even higher if more states adopt the new regulations. A copy of the final rule is available on EPA’s website at http://www.epa.gov/epawaste/hazard/dsw/rulemaking.htm.

I. Impact on the Metal Casting Industry

The new definition of solid waste could facilitate more recycling of spent foundry sand that may exhibit one or more characteristics of hazardous waste. Under the final regulation, hazardous foundry sand that is reclaimed for metals recovery and beneficial reused would not be “discarded” for regulatory purposes, and would not, therefore, be subject to hazardous waste regulations, provided that foundries and reclamation facilities meet a set of conditions regarding the management and recycling of the sand. The revised definition of solid waste would also apply to other hazardous secondary materials generated by the metal casting industry that are recycled consistent with the conditions of this final rule.

II. Basic Structure of Final Rule

The revised definition of solid waste is comprehensive and detailed rulemaking. There are four major components of the final rule:

1. Under the Control of the Generator Exclusion (a self-implementing exclusion for materials that are recycled under the control of the generator);
2. Transfer-Based Exclusion (a self-implementing exclusion for materials that are transferred to another company for recycling);
3. Non-Waste Determination Procedure (a petition process); and

A brief summary of these components and the basic structure of the final rule is provided below.
III. Exclusion When Reclaimed Under the Control of the Generator

Secondary materials are not considered discarded for regulatory purposes and are excluded from the definition of solid waste, if they are generated and then reclaimed onsite at the same facility, by the same company, or pursuant to an agreement whereby the generator retains ownership of, and responsibility for, the material. EPA indicated that when materials remain under the control of the generator, fewer environmental problems result from the recycling activity. This could include on-site thermal reclamation of foundry sand and tolling agreements with off-site facilities to reclaim the sand.

Under the generator-control exclusion, generators must meet the following conditions:

- legitimately recycle the materials,
- materials are not recycled by “use constituting disposal” (e.g., application to land) or burned for energy recovery,
- materials are not inherently waste-like materials,
- not speculatively accumulate the materials,
- submit notifications,
- ensure that the materials are contained prior to during and after reclamation, and
- materials are reclaimed within the United States.

IV. Conditional Exclusion When Transferred to a Facility for Reclamation

Because EPA has greater concerns about hazardous secondary materials that are not under the control of the generator, the Agency finalized a conditional exclusion for materials that are transferred to another facility for reclamation. For materials that are transferred to another facility for reclamation, generators, reclaimers and intermediate facilities must meet certain conditions in order for the material to be excluded from the definition of solid waste

Exclusion Conditions for Generators

Under the transfer-based exclusion, generators must meet the following conditions:

- legitimately recycle the materials,
- materials are not recycled by “use constituting disposal” (e.g., application to land) or burned for energy recovery,
- materials are not inherently waste-like materials,
- not speculatively accumulate the materials,
- submit notifications,
- ensure that the materials are contained prior to during and after reclamation,
- make “reasonable efforts” to evaluate the reclaimer and intermediate facility that they will safely and legitimately recycle the materials,
- maintain records of off-site shipments and confirmations of receipt, and provide notice and obtain consent for exports.
**Reasonable Efforts Condition** – Based on its analysis, EPA found that environmental problems associated with recycling were significantly reduced where companies had performed some type of environmental due diligence on reclaimers or intermediate facilities (i.e., facilities that stored, processed or blended materials before being sent to the reclamer). Under this exclusion, generators must, therefore, evaluate a reclamer or intermediate facility to ensure that they intend to manage the materials properly and legitimately recycle them.

Generators can use any credible evidence available in making the evaluation, including information gathered by the generators, provided by the reclamer, and/or provided by a third party, in lieu of personally performing an environmental audit.” Where practical, a site visit to the reclamation facility and a financial evaluation of the company would be advisable.

Generators must make the reasonable efforts and document the evaluation every three years for each reclamation or intermediate facility that manages its hazardous secondary materials. The documentation includes a certification statement.

The regulation provides a minimum standard for reasonable efforts that includes addressing the following five questions.

1. Is the reclamation process legitimate?

2. Has the facility submitted its notification and indicated that it has financial assurance?

3. Does publicly available information indicate that there are no formal enforcement actions against the facility in the past three years and that the facility is not a “significant non-complier” with hazardous waste regulations? If there are enforcement issues, does the generator have credible evidence that the material will be managed properly?

4. Does the facility have the appropriate equipment and trained personnel to recycle the material safely?

5. Does the facility have the required permits to manage recycling residues, have a contract to dispose of them at a permitted facility, or does the generator have credible evidence that the recycling residues will be managed safely?

The “reasonable efforts” condition is not required if generators send hazardous secondary materials to recyclers that are operating under a RCRA Part B permit. Materials managed for reclamation under RCRA Part B permit would be excluded from the definition of solid waste, provided that the other conditions are met.
Exclusion Conditions for Reclaimers and Intermediate Facilities

Reclamation facilities must also meet the following conditions for the transfer-based exclusion:

- legitimately recycle the materials,
- materials are not recycled by “use constituting disposal” (e.g., application to land) or burned for energy recovery,
- materials are not inherently waste-like materials,
- not speculatively accumulate the materials,
- submit notifications,
- ensure that the materials are contained prior to during and after reclamation and managed in a manner that is at least as protective as analogous raw materials,
- manage recycling residues safely,
- maintain records of shipments and send confirmations of receipt to generator, and
- meet the financial assurance requirements.

Materials Management – Reclamation facilities must manage secondary materials in a manner that is at least as protective as that used for analogous raw materials. If the secondary material is not analogous to raw materials, then the material must be contained as to prevent releases into the environment. This may include using tanks or containers, wetting dry materials to prevent any releases, or designing containment systems to prevent releases from land-based management units.

Residuals Management – EPA’s studies indicated that the mismanagement of recycling residues was the cause of one third of the environmental contamination associated with recycling facilities. As a result, EPA required that any residuals generated from the reclamation process must be managed in a manner that is protective of human health and the environment.

Financial Assurance Requirements – As a regulatory precaution to guard against recycling facilities not having the necessary financial resources to address any potential environmental releases or contamination, reclamation facilities and intermediate facilities that receive hazardous secondary materials from off-site generators must meet the financial assurance requirements. Reclamation facilities must demonstrate that financial resources will be available to pay for closure of the facility or in the event of environmental contamination from the release of hazardous constituents at the facility through one or more of the financial assurance methods:

- trust fund,
- surety bond guaranteeing payment into a trust fund,
- letter of credit,
- insurance,
- financial test and corporate guarantee,
multiple financial mechanisms (but not including financial test and corporate guarantee).

In addition, reclaimers must meet the liability coverage requirements for sudden and accidental occurrences at their facility.

V. Non-Waste Determination

In addition to the exclusions discussed above, EPA also provided an administrative petition process to receive a formal determination that a recycled hazardous secondary material is not discarded. This process is similar to that provided in the current RCRA regulations for solid waste variances. EPA is allowing the following types of non-waste determinations: 1) hazardous secondary materials recycled in a continuous industrial process, and 2) hazardous secondary materials that are indistinguishable in all relevant aspects from a product or intermediate.

To obtain a non-waste determination, the facility must demonstrate that the hazardous secondary material meets the eligibility criteria and that it is legitimately recycled. A petitioner may chose to seek a non-waste determination to provide regulatory certainty regarding the status of a recycled secondary material. After a non-waste determination is granted, the hazardous secondary material would not be subject to any of the restrictions or conditions of the self-implementing exclusions discussed above.

VI. Legitimate Recycling Provision

Mandatory Factors

The core of legitimate recycling rests on the following mandatory factors: 1) the hazardous secondary materials must provide a useful contribution to the recycling process or to the product of the recycling process, and 2) the recycling process must produce valuable product. EPA indicates that these two factors are fundamental to legitimate recycling and any industrial process that does not conform to these factors would be considered “sham” recycling.

Non-Mandatory Factors

EPA also indicated that the two additional factors should be considered in assessing whether the recycling is legitimate: 1) the secondary materials must be managed as valuable commodities, and 2) the products of the recycling activity must not contain significantly higher levels of hazardous constituents than are in analogous products. EPA considers these factors as important in determining legitimacy, but they are not considered mandatory because some legitimate recycling does not necessarily conform to these factors.

In determining the legitimacy of the recycling, facilities must evaluate all of the factors and consider the legitimacy as a whole. For example, facilities can consider the
protectiveness of the storage methods, the potential exposure to hazardous constituents in
the products, the bioavailability of the hazardous constituents in the product and other
relevant factors.

These legitimacy factors are applicable to all recycling activities under the three types of
exclusions discussed above. To be eligible for any of the exclusions, the recycling of any
secondary hazardous material must be legitimate.

VII. Notification Requirements

Facilities must submit a notification to the appropriate EPA regional office or an
authorized state prior to operating under the exclusion. Subsequently notifications must
be submitted by March 1st of each even numbered year using EPA Form 8700-12.

Notifications must include the following information:

- name, address and EPA identification number;
- name and telephone number of a contact person;
- the facility NAICS code;
- type of exclusion or exclusions that the facility is claiming;
- whether the reclaimer or intermediate facility has financial assurance;
- when the facility expects to begin managing materials;
- a list of hazardous secondary materials to be managed;
- whether the materials will be managed in a land-based unit;
- the quantity of materials to be managed annually; and
- the certification signed by an authorized representative (included in EPA Form
  8700-12).

With the information provided in the notifications, EPA and the states will be able to
monitor the compliance of facilities; compile credible information for the public; measure
the performance and impacts of the rulemaking; and target future program efforts to
facilitate additional recycling opportunities.

VIII. Effective Date and Applicability in States

The final rule is effective 60 days from the date of publication in the Federal Register
(i.e., December 29, 2008) in states without authorized RCRA programs (e.g., Alaska,
Iowa, Puerto Rico and Virgin Islands). The rule is not effective in an authorized state
until the state adopts the rule into its own state regulations. While adoption of federal
regulations is automatic in some states, most states must take some affirmative action to
adopt the new regulation.

States have been generally supportive of the revised definition of solid waste, but have
expressed the need for additional regulatory conditions to minimize the potential
environmental releases that may be associated with some recycling activities. EPA has
indicated that it will be undertaking an outreach effort to states to facilitate the adoption
of the new regulatory definition of solid waste. In most cases, generators and recycling facilities will have to undertake lobbying efforts in individual states to get these new regulatory requirements adopted in states.

Environmental groups have opposed EPA’s efforts to revise the definition of solid waste. It is not yet clear whether environmental groups’ opposition is strong enough to trigger a legal challenge. Parties have 90 days from the date of publication in the Federal Register (i.e., January 28, 2009) to file a legal challenge. Appropriate updates on this issue will be provided as they are available.

IX. Conclusion

The revised definition of solid waste appears to provide more opportunities to recycle hazardous secondary materials. The rule does, however, include many details and options that must be evaluated to identify the most appropriate and effective manner to encourage safe and legitimate recycling and its impact on regulated industries such as the metal casting industry.

If you have any questions on EPA’s revised definition of solid waste and how it may impact the metal casting industry, please contact Jeff Hannapel or Christian Richter at jhannapel@thepolicygroup.com or crichter@thepolicygroup.com.