Spent Solvents from Printed Circuit Board Manufacture

A manufacturer of printed circuit boards sends spent solvents through a recycling and cleaning process via pipeline and tanks. The recycled solvent is then used again in the manufacturing process. The spent solvent would normally be considered a hazardous waste, but in this situation it is recyclable material which is used at the site at which it was generated. If the solvent is covered by RCRA, it would not qualify for exemption from generator fees under section 25143.2 of the Health and Safety Code because it is cleaned before being reused. However, the solvent is exempt under section 25205.5(d) because it is recycled and used on site. 8/25/89. (Am 2003-1). (Note: subdivision (d) has been renumbered.)
Your April 28, 1989 memorandum raises several questions concerning Health and Safety Code Section 25205.5(d), which exempts a generator from paying the generator fee concerning any hazardous waste which is recycled “as part of the line of production.” Specifically, you outline three scenarios in which certain materials are recycled as examples of situations requiring an interpretation of Section 25205.5(d).

Section 25205.5(d) is one of many Health and Safety Code sections that evidence the Legislature’s intention to promote the reclamation and recycling of usable materials from hazardous waste. For example, in the Hazardous Waste Reduction, Recycling, and Treatment Research and Demonstration Act of 1985 (Health and Saf. Code §§ 25244 et seq.), the Legislature declared that “whenever possible, the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible, and that waste that is generated should be recycled, treated, or disposed of in a manner that minimizes any present or future threats to human health or the environment.” The Act requires the Department of Health Services to publish a study and recommendations concerning the establishment of programs for achieving reductions in hazardous waste generation, and to provide grants for the research, development and demonstration of hazardous waste reduction and recycling technologies.

Section 25170 of the Health and Safety Code instructs the Department of Health Services to “investigate market potential and feasibility of use of hazardous wastes and recovery of resources from hazardous wastes” and to “promote recycling and recovery of resources from hazardous wastes.” Pursuant to Section 25175, the DOHS is to prepare a list of specific hazardous wastes which are economically and technologically feasible to recycle. Once the DOHS determines that the recycling of a certain hazardous waste is feasible,
the disposer of such hazardous waste is to recycle it, and failure to do so may result in the assessment of as much as twice the original disposal fee. (Health and Saf. Code § 25175(b).)

Given the emphasis on recycling in the toxic and hazardous substance legislation, any exemptions from statutory regulation for recycled or recyclable materials should be read broadly to effectuate the legislative policy of encouraging recycling.

“Recyclable material” is defined in Health and Safety Code Section 25120.5 as:

...a hazardous waste that is capable of being recycled, including but not limited to, any of the following:

(a) A residue.

(b) A spent material, including, but not limited to, a used or spent stripping or plating solution or etchant.

(c) A material that is contaminated to such an extent that it can no longer be used for the purpose for which it was originally purchased or manufactured...

(d) A byproduct listed in the regulations adopted by the department as “hazardous waste from specific sources” or “hazardous waste from nonspecific sources”.

(e) Any retrograde material that has not been used, distributed, or reclaimed through treatment by the original manufacturer or owner by the later of the following dates:

(1) One year after the date when the material became a retrograde material.

(2) If the material has been returned to the original
manufacturer, one year after the material is returned to the original manufacturer.

“Retrograde material” is a hazardous material which is not to be used in the manner originally intended, and which has undergone some chemical or physical change during storage, has exceeded its shelf life, is banned, or cannot be used because of economics, health or safety, or environmental hazard. (§ 25121.5.)

Health and Safety Code Section 25121 defines “recycled material” as “a material which is used or reused, or reclaimed.” “Used or reused material” is material which is either:

(a) Employed as an ingredient, including use as an intermediate, in an industrial process to make a product. However, a material is not a used or recycled material if distinct components of the material are recovered as separate end products.

(b) Employed in a particular function or application as an effective substitute for a commercial product. (§ 25122.)

“Reclaimed materials” are those which are processed to recover a usable product, or which are regenerated. (§ 25120.1.)

In furtherance of its goal of encouraging the recycling of hazardous waste materials, the Legislature created an incentive to recycle by defining a certain class of materials as not hazardous waste at all, and therefore not subject to the permit requirements or disposal, facility, and generator fees in Chapter 6.5. Section 25143.2 provides broad relief from the requirements of the hazardous waste legislation for recyclable material which is in fact used or recycled. Subsection (b) provides that, with some exceptions, recyclable material is not considered a hazardous waste when it can be shown to be recycled by any of the following methods:

(1) Used or reused as an ingredient in an industrial process to make a product, if the material is not being reclaimed.

(2) Used or reused as a safe and effective substitute for commercial products, if the material is not being reclaimed.
(3) Returned to the original process from which the material was generated, without first being reclaimed, if the material is returned as a substitute for raw material feedstock, and the process uses raw materials as principal feedstocks.

This exemption applies to any type of recyclable material, but it may not be reclaimed; that is, the material cannot be cleaned, filtered, or otherwise processed prior to being used again.

Section 25143.2(d) concerns non-RCRA hazardous waste only. Pursuant to that subsection, non-RCRA hazardous waste is not a waste if the material meets any of the following requirements:

(1) The material can be shown to be recycled and used at the site where the material was generated.

(2) The material qualifies as one or more of the following:

(A) The material is a product, which has been processed from a hazardous waste,...if the product meets both of the following conditions:

(i) The product contains no hazardous constituents, other than those for which the material is being recycled.

(ii) The product is used, or distributed or sold for use, in a manner for which the product is commonly used...

(4) The material is both transported and used or reused, as an ingredient in an industrial process to make a product, if the material is not treated before that use or reuse.

Notwithstanding the above language, Section 25143.2(d) makes certain recyclable materials hazardous wastes subject to full
regulation, even if they are recycled. Included are materials used to produce fertilizer, burned for energy, accumulated speculatively, and determined to be “inherently waste like.”

Finally, Section 25205.5(d) exempts a generator from paying the generator fee concerning any hazardous waste which is recycled “as part of the line of production.”

Reading the above-cited statutory sections together, the following legislative scheme emerges. Any type of hazardous waste produced by a process will not be considered waste if it is reused to make a product, used as a substitute for a commercial product, or returned to the original process as a substitute for raw material feedstock. However, the hazardous waste cannot first be treated before being reused. If the hazardous waste is a non-RCRA waste, it is exempt from regulation if it is reused at the site where it was generated, or the waste is a product which is sold or distributed for use in a manner for which the product is commonly used, regardless of whether it is first treated of not. The non-RCRA waste is also exempt from regulation if it is transferred between facilities operated by the same person for purposes of recycling. However, if the material is both transported and reused as an ingredient in an industrial process, it cannot be treated before such reuse. Finally, if any type of hazardous waste produced by a process is recycled inline, whether treated or not, the generator of such waste does not have to pay a generator fee, but other fees (such as the facility fee) and permit requirements may apply.

The three scenarios described in your memorandum provide examples for discussion of this statutory scheme. In the first example, a manufacturer produces printed circuit boards. In the manufacturing process, spent solvents are sent through a recycling and cleaning process via pipeline and tanks. After completion, the recycled solvent is again used in the process. The spent solvent would normally be considered a hazardous waste, but it is “recyclable material” (see § 25120.5(b)) which is “used” at the site where the material was generated (see § 25121(a)). Assuming the solvent is a material covered by RCRA, the process would not fall within the language of Section 25143.2(b), because the solvent is cleaned before being reused. Therefore, the broad exemption of that section is not applicable. However, in this context, it would appear that the cleaning process is an integral part of the manufacturing process, and simply a continuation of the “production pipeline.” The hazardous waste is therefore being recycled inline, and Section 25205.5(d) provides an exemption from the generator fee. Note that the fact that the waste is
treated before reuse may subject the manufacturer to a facility fee.

In the second example, the same situation applies, except that the manufacturer stores the solvent in barrels for one week prior to recycling the waste. After recycling, the solvent is once again used in the production. Neither Section 25143.2 nor 25205.5(d) specifies a time period during which recyclable material must be used in order for the exemptions to apply. However, an operation that holds hazardous waste onsite for more than 90 days is considered a “storage facility” (Health and Saf. Code § 25123.3), and any waste stored for more than one year is considered “disposed of” (Tit. 22, California Code of Regulations, § 66535). These references suggest that materials stored indefinitely do not come within the ambit of Section 25143.2, or 25205.5(d). In this example, the solvent is only stored for one week. However, for the reasons stated in the first example, Section 25143.2(b) is not applicable. In addition, since the solvent is removed from the line of production, Section 25205.5(d) offers no relief from imposition of the generator fee.

In the third example, an auto shredder stores his waste in piles onsite. Each day he sends the prior day's waste through a recycling process. Metals and other products are removed. Any residues remaining are properly disposed of. Assuming that the metals and other products removed are hazardous materials, Section 25143.2(b) would apply, and the materials would not be considered waste, if they are used in an industrial process to make a product, or used as a substitute for a commercial product, without first being treated. In addition, if the materials are non-RCRA materials, they would not be considered waste as long as they are reused in a manner for which the materials are commonly used. The non-RCRA materials may be transported before reuse, as long as they are not treated. Section 25205.5(d) would not apply, however, since the materials are not recycled inline, but are used or reused in another process.

It should be noted that Senate Bill 475 makes no changes in Section 25143.2, but does replace Section 25205.5(d) with new Section 25205.5(e), which reads, “Any hazardous materials which are recycled, and used onsite, and are not transferred offsite, are not hazardous wastes for purposes of this section.” This new language is broader and no longer requires that the materials be recycled “in the line of production,” but only that they be recycled and used “onsite.” Under new Section 25205.5(e), the second example included in your memorandum would not subject the manufacturer to the
generator fee, since the solvent is recycled and used onsite, even though it is held in barrels for one week first.

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