VIA HAND DELIVERY

Ms. Elizabeth Cotsworth
Acting Director, Office of Solid Waste
U.S. Environmental Protection Agency
9th Floor, Crystal Station
2800 Crystal Drive
Arlington, VA 22202

Dear Elizabeth:

Thank you for meeting with Mike Steinberg, Ron Shipley and me last week, particularly on such short notice. We very much appreciate you and your staff taking the time to listen to our ideas regarding how the Agency should address the excessive regulatory burdens created by the Agency's "mixture and derived-from" rules. These two rules result in treated and dilute wastes being regulated as though they were the hazardous waste from which they originated. As we told you, as long-ago as 1989, CMA filed a rulemaking petition requesting that EPA establish concentration-based endpoints that will allow treated or dilute wastes to be regulated non-hazardous waste. Our petition came after several discussions with Agency staff who recognized that these two rules resulted in regulating low risk wastes as if they were hazardous wastes. Indeed, the Agency recognized such over-regulation when it promulgated these rules in 1980. See 45 Fed. Reg. 33,095.

As we discussed, we are very concerned that EPA's long-awaited HWIR-process waste proposal that will be published in November, will have limited practical value to address a major issue. In 1992 EPA acknowledged the huge scope of the problem. "[M]illions of tons of mixtures and derived-from residuals that must be managed as hazardous waste because of their history . . . may actually pose quite low hazards. . . . EPA believes that low-risk wastes should not be subject to full subtitle C control." 57 Fed. Reg. 21,540, 21,541 (May 20, 1992). Nevertheless, the Agency's forthcoming proposal would do very little to remove these millions of tons of wastes from Subtitle C regulation if it is promulgated as a final rule in April 2001.

Our concern over the practical value of your upcoming proposal did not crystalize until late this Spring when we found out that EPA was only planning on proposing concentration-based exit levels for approximately 40 hazardous constituents. With over 400 Listed wastes and more than 300 hazardous constituents that need to be addressed, exit levels for 40 constituents represents a paltry amount. We decided to hold off reaching any negative conclusion about the Agency's proposal, however, until after we examined which constituents would be included. We reasoned that if these forty constituents were among those most widely contained in hazardous waste, then the proposal might be useful. After the Agency initially refused to give

us the list of constituents and we filed a request under the Freedom of Information Act, we got the list and have concluded that EPA's proposal will not yield any practical results.

Our conclusion disappoints us. As you know, we -- as well as many other stakeholders -- have supported the Agency's efforts to rectify the over-breadth of these two rules. For example, CMA agreed to extend court deadlines when EPA missed statutorily-established deadlines, and provided the Agency with political support for its efforts. After EPA decided to develop a mathematical model to establish the levels for when a waste is not hazardous, we helped fund an expert to critique the Agency's work.

We have supported yours efforts for many reasons. For example, not only will fixing the overbreadth of these two rules save our members money, but the Agency's chosen method to address the issue, i.e., developing risk-based concentration levels is consistent with our overall position of supporting a risk-based regulatory program.

We have been pleased with the support that the Administration has given this effort as well. Revising these two rules is a top priority of the Administration's reinvention efforts.
We have also recognized that the path that EPA has chosen to address the overbreadth of the mixture and derived-from rules is a difficult one. By choosing to create a computer model that will mimic how chemical constituents biodegrade, disperse, and attenuate in the environment, the Agency has decided to push the science of computer modeling to its limits.

However, we now fear that the Agency's effort will not significantly fix the problem for years to come. Not only will the Agency's proposal cover a small number of constituents, but, because the model is developmental, it may be flawed. And, because the time between the proposal and the Court imposed deadline for final promulgation of the Agency's selected method for changing the mixture and derived-from rules is relatively short, there will be little time to address problems with the model let alone develop concentration levels for additional constituents. Therefore, over twenty years after it recognized that these two rules over-regulate low-risk wastes, the Agency will still not have rectified the problem. We trust that you agree that this result is simply unacceptable and does not fulfill the Agency's responsibilities or its policy objectives.

In coming to these realizations this past Spring and Summer, we though that it might be prudent for EPA to look for other ways to address the over-regulation created by the mixture and derived-from rules that can be implemented by the court ordered deadline. In this way EPA will not only cure a long-standing problem, but it would allow the Agency to fulfill a statutory mandate imposed in 1992 to fix this problem by October 1, 1994.

Thus, we decided to "think outside of the box" and come up with other ways of addressing the over-regulation problem. This took a little bit of doing since, as we told you, we support the

Agency's efforts to develop risk-based endpoints, and have a lot invested in the successful development of the Agency's model. Keeping in mind that the Agency will have few resources to devote to alternative solutions, we limited ourselves to thinking about solutions that are based on other Agency rules, and therefore consistent with traditional RCRA policies. We also wanted to make suggestions that would not preclude your continuing work on the model even if you promulgate some other solutions.

Thus, we came up with five suggestions that we urge you to propose in your upcoming HWIR-process waste proposal. We believe that you can propose them with very little delay since they are similar to these other rules that are already on the books. So, in order to provide meaningful relief from the overbreadth of the mixture and derived-from rules, we suggest that the Agency propose and strive to finalize these five suggestions that would expand upon existing exclusions from the regulatory definition of hazardous waste. Because these additional exclusions expand upon prior Agency decisions and they are consistent with protecting human health and the environment. They are also easy to implement and because of their similarity to other provisions in the RCRA's base rules, they are likely to be adopted in authorized state programs. Finally, because the exclusions address materials that clearly should not be regulated as listed hazardous wastes, the Agency's adoption of the exclusions should not be unduly controversial.

We have attached five issue papers that describe each of these suggested exclusions -- two that are designed to address mixtures and three that address treated wastes -- and briefly summarize each exclusion below:

1. Expansion and revisions to "Headworks Exemption." In 1981, EPA excluded industrial wastewater mixtures containing low concentrations of particular F-listed spent solvents, as measured by mass balance calculations, from being managed as hazardous waste, if they were managed in certain ways regulated under the Clean Water Act. Our suggestion is to expand the exclusion to low concentrations of other hazardous wastes as well as allowing facilities to use direct monitoring methods to assure that the concentration limits for wastewaters are met. Expanding the headworks exemption to apply to these additional wastewaters will avoid costly and unnecessary Subtitle C regulation of large volumes of low-risk wastes that already are protectively managed in NPDES or CWA-pretreatment systems. The suggested exclusion also does not require any new policy determinations by the Agency, and will be familiar to states, and to other stakeholders.

2. Modification to the "De Minimis Loss Exemption." In 1981, EPA also excluded from the definition of hazardous waste industrial wastewaters that contain de minimis quantities of P and U list wastes as a result of losses during routine handling. However, the Agency failed to include similar rules for de minimis losses from handling of F and K listed wastes. As with the headworks exemption, expanding the de minimis loss exemption to wastewaters containing de

minimis quantities of F and K list wastes will not decrease human health or environmental protection, does not require any new policy determination, and will be familiar to states and to environmental groups.

3. New Point of Generation for Wastes Derived from the Treatment of Hazardous Wastewaters. Aggressive biological treatment sludges and treated wastewaters in NPDES or CWA-pretreatment systems are not similar to the listed wastewaters from which they are derived. By identifying biological treatment sludges and treated wastewaters that are not characteristically hazardous as newly generated wastes, EPA will avoid Subtitle C regulation of very high volumes of low-hazard wastes. This new-point-of-generation approach has been part of the Land Disposal Restriction program for characteristic wastes for many years. See, e.g., 55 Fed. Reg. at 22,661-62 (June 1, 1990). In the LDR program, EPA recognized that various treatment residuals differ from the wastes from which they are derived and thus should not continue to be regulated as the same wastes. This insight can easily and protectively be applied to listed wastes subjected to aggressive biological treatment, without raising any significant concerns or implementation difficulties.

4. New Point of Generation for Leachate Derived from Landfill or Land Treatment Units Managing Hazardous Waste. Leachate derived from hazardous waste landfills or land treatment units is regulated as hazardous waste F039. Such leachate often is incinerated or subject to other costly and unnecessary treatment, rather than managed in on-site wastewater treatment systems. Such leachate, which is amenable to treatment in Clean Water Act systems, should be identified as newly generated wastes when managed in NPDES or CWA-pretreatment treatment systems.

5. New Point of Generation for Residues Derived from Combustion of Hazardous Waste. As with residues from aggressive biological treatment systems, ashes, solids, and scrubber waters from hazardous waste combustors differ dramatically from the listed wastes from which they are derived. Such combustors destroy virtually all organic constituents in the wastes, and any metal constituents in the treatment residues are adequately regulated by the toxicity characteristic. By treating the combustion residues as newly generated wastes, EPA would avoid needlessly regulating large quantities of low-risk solid and liquid wastes.

The attached papers reflect our thoughts on how the Agency could provide regulatory relief by making incremental modifications to the existing regulations. We think they provide the best opportunity for the Agency to provide substantive regulatory relief for some specific low-risk, high-volume wastes in a protective and responsible fashion. We are anxious to engage in discussions with your staff over the details of these exclusions, and how they might be included in the upcoming proposal. We are not wedded to particular details, but we are strongly committed to making progress on the long-overdue goal of actually letting some low-risk wastes exit Subtitle C.

I will be out of the office until August 23, but Ron Shipley (ron_shipley@cmahq.com or 703-741-5162) and Mike Steinberg (stei7141@mlb.com or 202-467-7141) will cover for me through August 20. Again, I thank you, David and other members of your staff for meeting with us and look forward to working with you in the weeks ahead.

Most sincerely,

Dorothy Allen Kellogg
Senior Director, Waste Management Programs

attachments
cc (w/attachments) (via hand delivery): Adam Klinger

CLARIFICATION & UPDATE OF THE "HEADWORKS" EXEMPTION

STATEMENT OF PROBLEM

Due to the "mixture rule," wastewaters containing small quantities of certain spent solvents on the "F" list of hazardous wastes of 40 CFR § 261.31 are considered listed hazardous wastes. To avoid this result, EPA in 1981 excluded wastewaters containing small quantities of these F-listed solvents, based on the mass-balance flow of these solvents through the headworks of industrial wastewater treatment systems. 40 CFR 261.3(a)(2)(iv)(A)&(B) (the "headworks exemptions"). EPA recognized that such wastewaters containing F-listed solvents can be adequately managed in a facility's wastewater treatment system and do not pose a substantial threat to human health or the environment. *See* 46 Fed. Reg. 56,582, 56,584 (November 17, 1981). The regulatory language adopted in 1981, however, does not allow generators to demonstrate compliance with these provisions by monitoring the actual concentration of spent solvents in untreated wastewater. Thus, facilities cannot rely on sampling and analysis to avail themselves of the exclusion; they can only employ the exclusion by relying on calculations of solvent consumption and flow rate into the headworks.

In 1986, EPA amended its listing regulations to add to the F-listed spent solvent listings benzene, 2-ethoxyethanol, 2-nitropropane and 1,1,2-trichloroethane. *See* 51 Fed. Reg. 6,537 (February 25, 1986). However, the Agency failed to make corresponding changes to the headworks exemption in order to exclude wastewaters containing these additional F-listed solvents. Similarly, the Agency has failed to amend the headworks exemption to exclude wastewaters containing low concentrations of F039 multi-source leachate derived solely from F-listed solvents. As a result, some wastewaters containing specific F-listed solvents are excluded from hazardous wastes, whereas other wastewaters containing similar quantities of different F-listed solvents are regulated, even though they pose no greater hazard than the excluded wastewaters. These wastewaters continue to be subject to needless and costly Subtitle C regulation.

SOLUTION

EPA should amend 40 CFR 261.3(a)(2)(iv)(A) and (B) to:

1. Clarify that monitoring of the actual concentration of spent solvents in untreated wastewater, *i.e.*, via sampling and analysis, is an acceptable alternative to demonstrating compliance with these provisions.

2. Incorporate benzene, 2-ethoxyethanol, 2-nitropropane and 1,1,2-trichloroethane.
3. Clarify that multi-source leachate derived solely from the disposal of the spent solvents listed in 40 CFR § 261.31 can also be managed as non-hazardous waste provided that compliance with these provisions can be demonstrated.

Suggested regulatory language is provided below. Changes to existing language are indicated in ***italics***:

> 40 CFR 261.3(a)(2)(iv)(A). One or more of the following solvents listed in § 261.31 – carbon tetrachloride, tetrachloroethylene, trichloroethylene ***[add solvents that meet the standards to be included in this paragraph], including multi-source leachate derived from the disposal of these solvents and no other listed hazardous wastes*** – Provided, That ***either the actual concentration of these solvents or*** the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 1 part per million; or . . .
>
> 40 CFR 261.3(a)(2)(iv)(B). One or more of the following solvents listed in § 261.31 – methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents ***[add solvents that meet the standards to be included in this paragraph], including multi-source leachate derived from the disposal of these solvents and no other listed hazardous wastes*** – Provided, That ***either the actual concentration of these solvents or*** the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 1 part per million; or . . .

JUSTIFICATION

- When the Agency established the headworks exemption, it relied upon a mass balance approach to avoid requiring facility owners to engage in costly sampling and analysis and to avoid incentives for volatilization of solvents from the wastewaters. There is no good reason to limit the headworks exemption from facility owners who routinely engage in sampling and

analysis that actually demonstrates that the wastewaters contain F001-F005 solvents below the headworks concentration limits. Actual monitoring provides flexibility and yields reliable, statistically defensible data. Such facility owners have already chosen to incur any sampling and analysis costs.

- Stringent civil and criminal penalties attach to non-compliance with RCRA management standards for hazardous wastes. The potential for regulatory enforcement assures that the exemption for the wastewaters will not be used as a means of unregulated disposal of F-listed solvents into wastewater treatment systems, or of unregulated volatilization in such systems. In recent rules, such as the HON, Subpart YYY and Subpart CC, the Agency has determined that incidental losses which might occur from managing these types of wastes do not pose any significant emission risk. Further, the wastewaters are managed in treatment systems that are subject to regulatory controls under the CWA. Stringent civil and criminal penalties also attach to non-compliance with the operating conditions specified by CWA regulations or in permits. Regulation of the wastewaters as hazardous wastes, moreover, cannot in any way prevent intentional volatilization of solvents before they become mixed with the wastewaters.

- When the Agency redefined the spent solvent listings, F001 - F005, it intended to exclude from the listings dilute mixtures or *de minimis* concentrations of these spent solvents. *See* 50 Fed. Reg. 53,316. In establishing existing 40 CFR §§ 261.3(a)(2)(iv)(A)&(B), the Agency recognized that small amounts of spent solvents are properly managed in on-site wastewater collection systems without posing a substantial hazard to human health or the environment. This is no less true for the additional F-listed solvents, which pose no greater hazards at the same low concentrations established for the wastewaters subject to the headworks exemption. In contrast, the high cost of regulating these wastewaters as hazardous waste purchases little or no increased protection of human health and the environment, and may actually decrease such protection. This is because such wastewaters must be further treated before disposal, increasing energy use and the potential for air emissions.

- Including multi-source leachate derived solely from the disposal of the spent solvents listed in § 261.31 in the exemption is a logical extension of the Agency's intent not to subject to full Subtitle C requirements dilute mixtures and *de minimis* concentrations of the F-listed solvents themselves.

DE MINIMIS LOSS EXEMPTION MODIFICATION

STATEMENT OF PROBLEM

Due to the "mixture rule," even small quantities of listed hazardous wastes that are mixed with non-hazardous wastewaters cause the wastewaters to be regulated as hazardous wastes. To avoid this result for "de minimis" losses that result from normal handling of P and U list wastes, EPA in 1981 excluded wastewaters containing these listed wastes in very low concentrations. 40 CFR 261.3(a)(2)(iv)(D). The de minimis exemption recognizes that small quantities of "P" and "U" listed wastes in wastewater mixtures can be adequately and protectively managed in a facility's industrial wastewater treatment system without Subtitle C regulation. *See* 46 Fed. Reg. 56, 582, 56,584 (November 17, 1981). This provision, however, does not apply to wastewaters containing *de minimis* losses from normal handling of "F" or "K" list hazardous wastes. 40 CFR §§ 261.31 and 32. As a result, such wastewaters are subjected to costly and unnecessary Subtitle C regulation. The additional costs provide no corresponding benefits of human health or environmental protection.

SOLUTION

EPA should amend 40 CFR § 261.3(a)(2)(iv)(D) to exempt wastewaters containing *de minimis* losses of any listed hazardous wastes.

Suggested regulatory language is provided below. Changes to existing language are indicated in ***italics***:

> 40 CFR 261.3(a)(2)(iv)(D). ***One or more hazardous wastes listed in Subpart D***, arising from *de minimis* losses of these materials from manufacturing ***and related*** operations in which these materials are ***generated***. For purposes of paragraph (a)(2)(iv)(D), "*de minimis*" losses include those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well maintained pump packings and seals; sample purging; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or

JUSTIFICATION

- When establishing 40 CFR § 261.3(a)(2)(iv)(D) in 1981, the Agency recognized that it should not regulate as hazardous waste wastewaters containing small losses from routine handling of discarded commercial chemical products and off-specification materials, the "P" and "U" wastes listed in §261.33. Such wastewaters are reasonably and efficiently managed in on-site wastewater collection systems without posing any significant hazard to human health or the environment. Similarly, wastewaters may contain small losses of the generic or source-specific "F" or "K" list manufacturing wastes in 40 CFR §§ 261.31 and 261.32. These losses result during analogous material handling and storage activities. They are just as reasonably and efficiently managed in on-site wastewater collection systems as wastewaters containing *de minimis* losses of P or U list wastes. For example, small quantities of drippage of a listed spent solvent may occur when transfer hose lines are disconnected. The wastewaters containing such drippage are often less concentrated and less toxic than equivalent wastewaters containing *de minimis* losses of commercial chemical products.
- Subtitle C regulation is not needed for wastewaters containing de minimis losses of F or K list wastes. These wastewaters can be adequately and protectively managed in industrial, non-hazardous wastewater treatment systems. The high cost of regulating these wastewaters as hazardous waste thus purchases little or no increased protection of human health and the environment, and may actually decrease such protection. This is because such "mixture rule" wastewaters may have to be further treated before disposal or discharge, increasing energy use and the potential for emissions.
- An exemption for wastewaters containing *de minimis* losses of F and K list wastes would not lead to indiscriminate management practices. Substantive and technical requirements apply to the management of F and K list hazardous wastes, such as the tank and container and air emission management standards of 40 CFR Parts 264 and 265, Subparts I, J, BB and CC. Stringent civil and criminal penalties attach to non-compliance with these management standards. The potential for regulatory enforcement assures that the exemption for such wastewaters will not be used as a means of unregulated disposal of F or K list wastes.

NEW POINT OF GENERATION FOR WASTES DERIVED FROM THE TREATMENT OF HAZARDOUS WASTEWATERS

STATEMENT OF PROBLEM

Very large volumes of biosludge and treated wastewaters are generated annually in industrial wastewater treatment systems using aggressive biological treatment to manage listed hazardous wastewaters. The untreated wastewaters are deemed to be listed hazardous waste by virtue of the "mixture rule," and the biosludges and treated wastewaters are deemed to be listed hazardous waste by virtue of the "derived-from rule." However, these biosludges and treated wastewaters are not hazardous and differ dramatically in their physical and chemical makeup from the original listed hazardous wastes from which they are derived. As a result, these high-volume biosludges and treated wastewaters are subjected to costly and unnecessary Subtitle C regulation. The additional costs provide no corresponding benefits of human health or environmental protection.

SOLUTION

EPA should amend 40 CFR 261.3(c)(2)(ii) to establish a new point of "generation" for biosludges and treated wastewaters derived from the aggressive biological treatment of listed hazardous wastewaters in NPDES or CWA-pretreatment wastewater treatment systems, so long as the biosludges or treated wastewaters do not exhibit a hazardous characteristic. This new-point-of-generation approach has been part of the Land Disposal Restriction program for characteristic wastes for many years. *See, e.g.*, 55 Fed. Reg. at 22,661-62 (June 1, 1990). In the LDR program, EPA recognized that various treatment residuals differ from the wastes from which they are derived and thus should not continue to be regulated as the same wastes.

Suggested regulatory language is provided below. Changes to existing language are indicated in ***italics***:

> 261.3(c)(2)(ii). The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste: . . .
>
> ***(_) Wastes derived from the aggressive biological treatment of listed hazardous wastewaters in a wastewater treatment systems the discharge of which is subject to regulation under either section 402 or section 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater).***

JUSTIFICATION

- Biosludges and treated wastewaters are <u>not</u> the waste that EPA originally listed, do not bear physical or chemical similarities to the original listed waste, and do not pose the hazards that caused EPA to list the waste in the first instance. EPA thus should not continue to regulate such biosludges and treated wastewaters as hazardous waste under the "derived-from rule," as if they were the listed waste itself.
- Any biosludges or treated wastewaters that exhibit a characteristic of hazard would remain subject to RCRA hazardous waste requirements. Federal and state hazardous waste characteristics thus assure that hazardous biosludges and treated wastewaters will be subjected to protective management under RCRA or state law.
- Aggressive biological treatment is a very effective and efficient means of treating many constituents of concern of industrial wastewaters. It is the basis of EPA's CWA effluent guidelines for wastewaters generated by the organic chemical industry. The treated wastewaters are discharged under the terms of the facility's applicable permit, and the biosludges are managed as a non-hazardous waste in compliance with the state's industrial waste management requirements. Further, stringent civil and criminal penalties attach to non-compliance with operating conditions specified by CWA regulations or in permits. The potential for regulatory enforcement assures that the aggressive biological treatment systems will properly treat the listed wastewaters. As the U.S. Court of Appeals for the District of Columbia Circuit held in *Shell Oil*, the "derived-from rule" is premised on the failure of treatment. Because aggressive biological treatment in wastewater treatment systems provides proper and successful treatment, the derived-from rule should not apply to biosludges or wastewaters generated from such treatment.
- Subtitle C regulation is not needed for such biosludges or treated wastewaters, which can be adequately and protectively managed in industrial, non-hazardous waste landfills and in the wastewater treatment system itself. The high cost of regulating these materials as hazardous waste thus purchases little or no increased protection of human health and the environment, and may actually decrease such protection. This is because "derived-from" biosludges and treated wastewaters may have to be further treated before disposal or discharge, increasing energy use and the potential for emissions.

NEW POINT OF GENERATION FOR LEACHATE DERIVED FROM LANDFILLS OR LAND TREATMENT UNITS MANAGING HAZARDOUS WASTE

STATEMENT OF THE PROBLEM

Due to the "derived-from rule," leachates from landfills or from land treatment units containing listed hazardous waste must be managed as hazardous wastes. However, these leachates differ dramatically in their physical and chemical makeup from the original listed hazardous wastes from which they are derived. For this reason, EPA has developed a separate listing code for multi-source leachate, F039. These "derived-from" leachates are normally subjected to costly and unnecessary incineration or other treatment at off-site facilities. In addition, the additional transportation and management from sending the wastes off-site may actually increase environmental risks and energy usage relative to the protective and cost-effective management in industrial wastewater systems, in which such leachates are clearly amenable to treatment.

SOLUTION

EPA should amend 40 CFR 261.3(c)(2)(ii) to establish a new point of "generation" for leachates derived from landfills or land treatment units managing listed hazardous waste, so long as the leachates are managed in a wastewater treatment system and do not exhibit a hazardous characteristic. This new-point-of-generation approach has been part of the Land Disposal Restriction program for characteristic wastes for many years. *See, e.g.*, 55 Fed. Reg. at 22,661-62 (June 1, 1990). In the LDR program, EPA recognized that various treatment residuals differ from the wastes from which they are derived and thus should not continue to be regulated as the same wastes. And, as EPA has recently recognized, when granting a similar exemption for certain leachates, wastewaters generated from hazardous waste can be effectively managed in Clean Water Act systems. 64 F.R. 6806, 6807 (February 11, 1999).

Suggested regulatory language is provided below. Changes to existing language are indicated in ***italics***:

> 261.3(c)(2)(ii). The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste: . . .
>
> ***( ) leachate derived from landfills or land treatment units containing listed hazardous waste, which is managed in a wastewater treatment system the discharge of which is subject to regulation under either section 402 or section 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater)***

JUSTIFICATION

- Leachate from landfills or land treatment units containing listed waste is **not** the waste that EPA originally listed. Leachate bears neither physical nor chemical similarities to the original listed waste, and does not pose the hazards that caused EPA to list the waste in the first instance. EPA thus should not continue to regulate such leachate as hazardous waste under the "derived-from rule," as if leachate were the listed waste itself.
- Any such leachate that exhibits a characteristic of hazard would remain subject to RCRA hazardous waste requirements. Federal and state hazardous waste characteristics thus assure that hazardous leachates will be subjected to protective management under RCRA or state law.
- Industrial wastewater treatment systems regulated under the National Pollution Discharge Elimination System or Clean Water Act-pretreatment programs are very effective and efficient in treating constituents of concern. There is no need to subject leachates derived from hazardous waste landfills and land treatment units to additional and unnecessary Subtitle C regulation, when they can be safely and efficiently managed in wastewater treatment systems. Leachates, which are dilute wastewaters, are clearly amenable to treatment in such systems. Further, substantial civil and criminal penalties assure that these wastewater treatment systems are properly operated and that the wastewaters they manage are properly treated. The treated wastewaters would be discharged under the terms of the facility's applicable permit, and the treatment sludges would be managed as a non-hazardous waste in compliance with the state's industrial waste management requirements.
- By allowing treatment of such leachate in industrial non-hazardous wastewater treatment systems and avoiding off-site incineration or other costly treatment, facilities would conserve their financial resources, reduce their energy usage, and reduce environmental risks relative to transpiration to and management in incinerators.

NEW POINT OF GENERATION FOR RESIDUES DERIVED FROM COMBUSTION OF HAZARDOUS WASTE

STATEMENT OF PROBLEM

Due to the "derived-from rule," ash, solids, and scrubber water derived from the combustion of listed hazardous wastes must be managed as hazardous wastes. However, these combustion residuals differ dramatically in their physical and chemical makeup from the original listed hazardous wastes from which they are derived. Subtitle C regulation is not needed for such combustion residuals, which can be adequately and protectively managed in wastewater treatment systems and industrial, non-hazardous waste landfills. The high cost of regulating these materials as hazardous waste also purchases little or no increased protection of human health and the environment, particularly as the combustion process destroys virtually all of the organics in the listed wastes from which these residuals are derived.

SOLUTION

EPA should amend 40 CFR 261.3(c)(2)(ii) to establish a new point of "generation" for wastes derived from permitted or interim status hazardous waste combustors burning listed hazardous wastes, so long as the residues do not exhibit a hazardous characteristic. This new-point-of-generation approach has been part of the Land Disposal Restriction program for characteristic wastes for many years. *See, e.g.,* 55 Fed. Reg. at 22,661-62 (June 1, 1990). In the LDR program, EPA recognized that various treatment residuals differ from the wastes from which they are derived and thus should not continue to be regulated as the same wastes.

Suggested regulatory language is provided below. Changes to existing language are indicated in ***italics***:

> 261.3(c)(2)(ii). The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste: . . .
>
> ***( ) Wastes derived from burning any listed hazardous waste in a permitted or interim status hazardous waste combustion device.***

JUSTIFICATION

- Residues from hazardous waste combustors are **not** the wastes that EPA originally listed.

They bear neither physical nor chemical similarities to the original listed waste, and do not pose the hazards that caused EPA to list the waste in the first instance. EPA thus should not continue to regulate these materials as hazardous wastes under the "derived-from rule," as if they were the listed wastes themselves.

- Hazardous waste combustion devices are very effective and efficient in treating constituents of concern. To meet their permit conditions such devices must demonstrate a 99.99% destruction-removal efficiency. Such a standard virtually assures the destruction of all organic constituents. Further, stringent civil and criminal penalties attach to non-compliance with operating conditions specified by regulation or in permits. The potential for regulatory enforcement assures that the combustors will properly treat the listed wastes. As the U.S. Court of Appeals for the District of Columbia Circuit held in Shell Oil, the "derived-from rule" is premised on the failure of treatment. Because hazardous waste combustors provide proper and successful treatment, the derived-from rule should not apply to their treatment residues.
- Any residues from hazardous waste combustors that nevertheless exhibit a characteristic of hazard – such as the toxicity characteristic for metals -- would remain subject to RCRA hazardous waste requirements. Federal and state hazardous waste characteristics thus assure that any combustion residuals that warrant hazardous waste regulation will be subjected to protective management under RCRA or state law.
- In addition, wastewaters from such combustion systems normally are managed in industrial wastewater treatment systems subject to regulation under the National Pollution Discharge Elimination System or Clean Water Act-pretreatment programs. These wastewater treatment systems also are very effective and efficient in treating constituents of concern, and thus there is no need to subject scrubber waters from hazardous waste combustion to additional and unnecessary Subtitle C regulation. As for the combustors, substantial civil and criminal penalties assure that these wastewater treatment systems are properly operated and that the wastewaters they manage are properly treated. The treated wastewaters would be discharged under the terms of the facility's applicable permit, and the treatment sludges would be managed as a non-hazardous waste in compliance with the state's industrial waste management requirements.
- As noted above, Subtitle C regulation is not needed for such combustion residuals, which can be adequately and protectively managed in wastewater treatment systems and industrial, non-hazardous waste landfills. The high cost of regulating these materials as hazardous waste thus purchases little or no increased protection of human health and the environment, and may actually decrease such protection. This is because many combustion residuals must be further treated before disposal, increasing energy use and the potential for emissions.