



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

FYI:

- Maria
- Steve
- Compendium

April 5, 1999

Mr. William Sirull
MADEP Bureau of Waste Prevention
Business Compliance Division
One Winter Street
Boston, MA 02108

Subj: MADEP/EPA ERP Meeting follow-up

Dear Bill:

The purpose of this letter is to provide you with follow-up to our meeting on Tuesday, March 2, 1999, at your Office regarding specific questions you had relating to EPA's position/interpretation of certain aspects of particular RCRA permitting exemptions as they relate to the proposed MADEP Industrial Wastewaters ERP Program. As we have said in past correspondence, since Massachusetts is authorized for the RCRA base program which includes the definition of hazardous waste, it maintains the authority to make more stringent regulatory interpretations.

The following is a quick summary of our response to your questions.

Question 1): Under EPA's "totally enclosed" treatment exemption, does the Agency interpret this to mean that the totally enclosed system be directly connected to a treatment process by hard-piping or can flexible piping be used?

Response: As a point of clarification, by hard-piping we are referring to connections composed of some type of metal compound with welded connections. Previous correspondence issued by the EPA ("the Agency") has stated that connections for a totally enclosed system must be composed of impermeable materials which prevent leaking and that these connections be inspected on a regular basis (see Appendix A: 2/18/83 RCRA Permit Policy Compendium letter). The Agency has not directly addressed the type of material that the connections must be made of, however, consideration of a piping system composed of duct work meeting the totally enclosed exemption was discussed in a 2/2/88 memorandum (see Appendix B) provided that the above mentioned conditions were met. A key characteristic of such a system is that it

prevent releases to the environment, EPA Region 1 has stated it's position on this in a letter dated 1/13/97 to Steven DeGabriele of MADEP (see Appendix C). Totally enclosed systems must also be directly connected to an industrial production process (see 40 CFR §260.10). The State should evaluate a system claiming the totally enclosed exemption in order to determine whether or not it meets the criteria for the exemption.

Issue 2): Does EPA have a definition of wastewater?

Response: There is no RCRA regulatory citation for the definition of wastewater. There is reference to a definition in the Land Disposal Restrictions (LDR) First-Third Regulations which defines wastewater as waste containing less than 1% total organic carbon (TOC) and less than 1% total suspended solids (see Appendix D: RCRA Permit Policy Compendium letter dated 5/2/88 and the attached August 17, 1988 Federal Register (FR) notice, 53 FR 31145). EPA correspondence issued prior to that FR notice refers to wastewater as being "...relatively dilute aqueous based wastes..." (See Appendix E: RCRA Permit Policy Compendium letter dated 8/19/86 and accompanying FR notice dated 2/2/82). Any claim that a highly concentrated waste is a wastewater should be evaluated carefully, it would be unlikely that it actually is. EPA, therefore, recommends that any assertion of wastes meeting the definition of wastewater that appear to be questionable should be made on a case by case basis by the State using the above assumptions as a reference.

Issue 3): Can wastewater recycling be considered exempt under the closed-loop recycling exemption?

Response: In general, wastewaters are not ordinarily considered to be commercial products (see Appendix F: RCRA Permit Policy Compendium memo dated 10/27/88). The regulations at 40 CFR Part 261, Subpart A, Section 4 (a)(8) specify the conditions which must be met in order to invoke the "closed-loop" recycling exemption. Valuable materials that are returned to the original production process or processes from which they were originally generated and are reused in that process generally can be considered exempt from RCRA. Absent any case-by-case determination to the contrary, wastewaters are not considered to be such valuable materials. By production process, the Agency means those activities that tie directly into the manufacturing operations (see Appendix G: RCRA Permit Policy Compendium memorandum dated 11/28/86).

Bill Sirull
Page 3
April 5, 1999

Should you have any questions regarding the above please contact me. I can be reached at (617)918-1647.

Sincerely,



Sharon M. Leitch, Environmental Engineer
Hazardous Waste Program Unit

enclosures

cc: Jeff Fowley, EPA
Tom D'Avanzno, EPA
Gary Gosbee, EPA
Ken Rota, EPA
Region 1 Hazardous Waste Policy Compendium, EPA

February 18, 1983

Mr. Duane W. Marshall
Regulatory Affairs Program Manager
NCASI
260 Madison Avenue
New York, New York 10016

Dear Duane:

The subject of what is and what is not a Totally Enclosed Treatment Facility has come up a number of times since we discussed the issue in July 1980. In the course of answering these questions, we prepared the enclosed Regulatory Clarification, which we now send to everyone that asks. It treats the subject generally, but I think it answers your questions.

If I can provide any further clarification please let me know.

Sincerely yours,

John P. Lehman
Director
Hazardous & Industrial Waste Division (WH-565)

Enclosure

bcc: Fred Lindsey

TOTALLY ENCLOSED TREATMENT FACILITY
Regulatory Clarification

I. Issue: From questions asked since promulgation of the regulations on May 19, 1980, it is clear that the definition and practical application of the term "totally enclosed treatment facility" require clarification.

II. Discussion: The definition appears in §260.10(a) as follows:

Totally enclosed treatment facility means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example is a pipe in which waste acid is neutralized.

A facility meeting this definition is exempted from the requirements of Parts 264 and 265 (See §§264.1(g)(5) and 265.1(c)(9)) and, by extension, the owner or operator of that facility need not notify nor seek a permit for that process. The purpose of this provision is to remove from active regulation those treatment processes which occur in close proximity to the industrial process which generates the waste and which are constructed in such a way that there is little or no potential for escape of pollutants. Such facilities pose negligible risk to human health and the environment.

The part of the definition which has generated the most uncertainty is the meaning of "totally enclosed." The Agency intends that a "totally enclosed" treatment facility be one which is completely contained on all sides and poses little or no potential for escape of waste to the environment even during periods of process upset. The facility must be constructed so that no predictable potential for overflows, spills, gaseous emissions, etc., can result from malfunction of pumps, valves, etc., associated with the totally enclosed treatment or from a malfunction in the industrial process to which it is connected.

This document has been retyped from the original.

Natural calamities or acts of sabotage or war (earthquakes, tornadoes, bombing, etc.) are not considered predictable, however.

As a practical matter, the definition limits "totally enclosed treatment facilities" to pipelines, tanks, and to other chemical, physical, and biological treatment operations which are carried out in tank-like equipment (e.g., stills, distillation columns, or pressure vessels) and which are constructed and operated to prevent discharge of potentially hazardous material to the environment. This requires consideration of the three primary avenues of escape: leakage, spills, and emissions.

To prevent leaking, the tank, pipe, etc., must be made of impermeable materials. The Agency is using the term impermeable in the practical sense to mean no transmission of contained materials in quantities which would be visibly apparent. Further, as with any other treatment process, totally enclosed treatment facilities are subject to natural deterioration (corrosion, etc.) which could ultimately result in leaks. To meet the requirement in the definition that treatment be conducted ". . . in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment" the Agency believes that an owner or operator claiming the exemption generally will have to conduct inspections or other discovery activities to detect deterioration and carry out maintenance activities sufficient to remedy it. A tank or pipe which leaks is not a totally enclosed facility. As a result, leaks must be prevented from totally enclosed facilities or the facility is in violation of the regulations.

A totally enclosed facility must be enclosed on all sides. A tank or similar equipment must have a cover which would eliminate gaseous emissions and spills. However, many tanks incorporate vents and relief valves for either operating or

emergency reasons. Such vents must be designed to prevent overflows of liquids and emissions of harmful gases and aerosols, where such events might occur through normal operation, equipment failure, or process upset. This can often be accomplished by the use of traps, recycle lines, and sorption columns of various designs to prevent spills and gaseous emissions. If effectively protected by such devices, a vented tank would qualify as a totally enclosed treatment facility.

When considering protective devices for tank vents, the question arises as to whether the protective device is itself adequate. The test involves a judgment as to whether the overflow or gaseous emission passing through the vent will be prevented from reaching the environment. For example, an open catchment basin for overflows is not satisfactory if the hazardous constituents in the waste may be emitted to the air. Similarly, it may also not be satisfactory if it is only large enough to hold the tank overflow for a brief period before it also overflows. However, even in this situation, alarm systems could be installed to ensure that the capacity of the catchment basin is not exceeded. Where air emissions from vents or relief valves are concerned, if the waste is non-volatile or the emissions cannot contain gases or aerosols which could be hazardous in the atmosphere, then no protective devices are necessary. An example might be a pressure relief valve on a tank containing non-volatile wastes. Where potentially harmful emissions could occur, then positive steps must be taken. For example, the vent could be connected to an incinerator or process kiln. Alternately, a sorption column might be suitable if emission rates are low, the efficiency of the column approaches 100 percent, and alarms or other safeguards are available so that the upset causing the emission will be rectified before the capacity of the column is exceeded. Scrubbers will normally not

be sufficient because of their tendency to malfunction and efficiencies typically do not approach 100 percent.

Tanks sometimes have floating roofs. To be eligible as a totally enclosed facility, such tanks should be constructed so that the roof has a sliding seal on the side which is designed to prevent gaseous emissions and protect against possible overflow.

The part of the definition requiring that totally enclosed treatment facilities be "directly connected to an industrial production process" also generates some uncertainty. As long as the process is integrally connected via pipe to the production process, there is no potential for the waste to be lost. The term "industrial production process" was meant to include only those processes which produce a product, an intermediate, a byproduct, or a material which is used back in the production process. Thus, a totally enclosed treatment operation, integrally connected downstream from a wastewater treatment lagoon would not be eligible for the exemption because the process to which it is connected is not an "industrial production process." Neither would any totally enclosed treatment process at an off-site hazardous waste management facility qualify, unless it were integrally connected via pipeline to the generator's production process. Obviously, a waste transported by truck or rail is not integrally connected to the production process.

Hazardous waste treatment is often conducted in a series of unit operations, each connected by pipe to the other. As long as one end of a treatment train is integrally connected to a production process, and each unit operation is integrally connected to the other, all qualify for the exemption if they meet the requirement of being "totally enclosed." If one unit operation is not "totally enclosed" or is not "integrally connected," then only unit operations upstream from that unit

would qualify for the exemption. The unit and downstream process would require a permit.

The device connecting the totally enclosed treatment facility to the generating process will normally be a pipe. However, some pipes (e.g., sewers) are constructed with manholes, vents, sumps, and other openings. Pipes with such openings may qualify as totally enclosed only if there is no potential for emissions or overflow of liquids during periods of process upset, or if equipment (sorption columns, catchment basins, etc.) has been installed to prevent escape of hazardous waste or any potentially hazardous constituent thereof to the environment.

This exemption for totally enclosed treatment facilities applies only to the facility itself. The effluent from that facility may still be regulated. If the waste entering the totally enclosed treatment facility is listed in Subpart D of Part 261, then the effluent from the facility is automatically a hazardous waste and must be treated as such, unless it is "delisted" in accordance with §§260.20 and 260.22. If, on the other hand, the waste entering the totally enclosed treatment facility is hazardous because it meets one of the characteristics described in Subpart C of Part 261, then the effluent waste is a regulated hazardous waste only if the effluent meets one of the characteristics. Since the totally enclosed treatment facility is exempted from the regulatory requirements, it is only the effluents from such processes which are of interest to the Agency. Thus, whether the waste in a totally enclosed treatment facility must be considered towards the 1000 kg/month small quantity generator limit, depends on whether it is a regulated hazardous waste as it exits the totally enclosed treatment facility.

Finally, it is important to note that if the effluents from a totally enclosed treatment facility are discharged to a surface

water body (lake or stream) or to a publicly owned treatment works or sewer line connected thereto, then these wastes are not subject to the RCRA hazardous waste controls at all but are, instead, subject to the Clean Water Act and regulations promulgated thereunder (See 45 FR 76075).

III. Resolution: In sum, a "totally enclosed treatment facility" must:

- (a) Be completely contained on all sides.
- (b) Pose negligible potential for escape of constituents to the environment except through natural calamities or acts of sabotage or war.
- (c) Be connected directly by pipeline or similar totally enclosed device to an industrial production process which produces a product, byproduct, intermediate, or a material which is used back in the process.

APPENDIX B

View Record Detail

Faxback 14022

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

February 2, 1988

MEMORANDUM

SUBJECT: Totally Enclosed Treatment System Proposal
from TDJ Group, Inc.

FROM: Joseph S. Carra, Director
Waste Management Division

TO: David A. Wagoner, Director
Waste Management Division
EPA Region VII

This is in response to your memorandum to Marcia Williams, which has been referred to my division for a response. I have reviewed your request for a determination of the applicability of the totally enclosed treatment (TET) exemption as it applies to the

process proposed for generic marketing by TDJ Group, Inc. TDJ Group has claimed confidential business information for the description of their treatment system. You have requested clarification on three issues:

1. whether the TDJ Group's proposal meets the TET exemption;
2. guidance on what parts of the treatment train would be considered TET; and
3. the location at which samples must be taken to demonstrate the success of treatment.

The Agency defines a totally enclosed treatment system in CFR as a treatment system that:

1. must be connected to an industrial process; and
2. constructed and operated to prevent the release of hazardous waste and any constituent thereof into the environment during treatment.

In your memorandum, you stated that the TDJ Group's proposal is similar to the proposal received by Region V for the Grede Foundry. The differences between the TDJ proposal and the Grede Foundry are the location of treatment and the method of collecting emissions dust from the cupola. In the TDJ proposal, treatment occurs between the cupola and the baghouse; while treatment occurs after the baghouse at the Grede Foundry. In the TDJ proposal, the

flue dust from the cupola is connected to the treatment system via ducts. In the Grede Foundry, the hood that collects the flue dust was not connected to the cupola but to the baghouse. Because the cupola was open to the environment, the Grede's Foundry treatment system would not qualify for the exemption. In the OSWER directive #9432.00-1, the Agency clarified to Region V that the cupola is part of an industrial production process and that the baghouse is part of a waste treatment process. Therefore, treatment downstream of a baghouse would not qualify for the TET exemption.

The Agency also responded to a letter received by Mr. Swed of RMT, Inc., dated December 22, 1986, requesting guidance on the application of the TET exemption to the treatment prior to the disposal of baghouse dust. In this letter, the Agency restated that cupolas are part of an industrial process while baghouses are part of a treatment process. Any totally enclosed processing that occurs in the ducts directly connecting the cupola to the baghouse would not be treatment subject to the RCRA permitting requirements. However, the baghouse and any treatment downstream of the baghouse would not qualify because the baghouse is open to the environment. This should answer your first and second questions.

Your third question refers to the location at which samples must be taken to demonstrate the success of treatment. Because the treatment system prior to the baghouse qualifies for the TET exemption, the equipment is not subject to the RCRA permitting process. The TDJ Group would have to show, through the design of the treatment system, that the system is totally enclosed. That is, there are no routine leakages of flue dust from the cupola throughout the treatment system. No other sampling is necessary, unless your office believes a sampling program is necessary to assure that no releases occur.

Attached to your memorandum, you have included a detailed description and drawing of the TDJ proposal. Based on our review of the design of the system and our best engineering judgement, the treatment system is totally enclosed because the flue dust from the cupola is transferred through the treatment system via closed ducts. Therefore, there appears to be no possibility of routine releases of the dust to the environment.

In summary, the treatment system prior to the baghouse would qualify for the exemption, but the baghouse and treatment downstream of the baghouse would not qualify for the exemption. In order to determine the effectiveness of the treatment system enclosure, the design of the system must show that the cupola and the treatment train are sealed, thereby preventing routine releases of constituents to the environment. Our review indicates that the TDJ Group design appears to meet these requirements. If your staff has any questions, they should contact Monica Chatmon of my staff on FTS 475-7236.

cc: Marcia Williams
Waste Management Division Directors, Regions I-X



APPENDIX C
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

January 13, 1997

Steven DeGabriele, Director
Division of Hazardous Materials
Massachusetts Department of Environmental Protection
One Winter Street, 7th Floor
Boston, MA 02108

Re: Cellini Purification Systems

Dear Mr. DeGabriele:

The purpose of this letter is to inform you of an issue regarding EPA and State interpretations of RCRA regulations. The attached memo discusses this issue which was raised at a meeting, at the request of the MADEP Innovative Technologies program, with the EPA and MADEP RCRA programs, the MADEP Industrial Wastewater section, and the EOEA on November 21, 1996, regarding Cellini Purification Systems.

Cellini Purification Systems has been working with the State through the Strategic Envirotechnology Partnership (STEP) program. A result of the STEP process was an examination of potential regulatory barriers to the application of the Cellini Controlled Atmospheric Separation Technology (CAST) system. One of the possible barriers identified was the differing EPA and MADEP interpretations of exemptions from RCRA permitting.

EPA has had two meetings with the MADEP and EOEA at which the issues were highlighted and proposed solutions developed. EPA's role at these meetings was to provide the federal regulatory interpretation of the RCRA permitting exemptions as they may apply to the Cellini system. The attached memo discusses those interpretations.

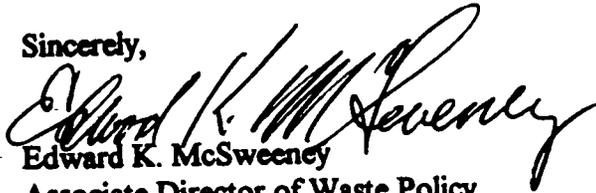
Since each of the New England states are authorized for the RCRA base program they maintain the authority to make more stringent regulatory interpretations. Individual state regulations may be both more stringent and broader in scope than the EPA regulations. Therefore, while the attached memo discusses the federal RCRA interpretation of the relevant regulations, its application may vary in individual states.



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Should you have any questions regarding this memo, please contact me at (617)565-3559. You may also contact Sharon Leitch of the Hazardous Waste Program unit at (617) 565-4879 regarding any technical issues associated with this memo or Jeffry Fowley of the Office of Regional Council at (617)565-1475 regarding any legal issues.

Sincerely,



Edward K. McSweeney
Associate Director of Waste Policy
Office of Ecosystem Protection

enclosure

cc: Gary Gosbee, Chief, Hazardous Waste Program Unit, EPA
Jane Downing, Chief, Massachusetts State Program Unit, EPA
Suzanne Parent, Chief, RCRA Technical Unit, EPA
Jeff Fowley, Office of Regional Council, EPA
Jim Michael, PSPD, EPA-HQ
Kathy Nam, OGC, EPA-HQ
Gina McCarthy, EOE
Linda Benevides, MADEP
Jim Miller, MADEP
Stephen Brown, Cellini Purification Systems, Ludlow, MA
John Duclos, NHDES
David Sattler, CTDEP
Steve Simoes, VTDEC
Leo Hellested, RIDEM
Stacy Ladner, MEDEP

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

J. F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

MEMORANDUM

DATE: January 13, 1997

SUBJ: RCRA Permitting Exemption For "Zero-Discharge" System
Manufactured by Cellini Purification Systems

FROM: Jeffry Fowley, Lead RCRA Attorney, ORC Region I

TO: Gary Gosbee, Chief, Hazardous Waste Program Section

NON-CONFIDENTIAL: MAY BE DISTRIBUTED TO STATE AND COMPANY

I. Introduction

The Commonwealth of Massachusetts is working with five other states to encourage the use of innovative technologies. One of the identified technologies is the Controlled Atmospheric Separation Technology™ ("CAST System") developed by Cellini Purification Systems of Ludlow, Massachusetts. The CAST System will sometimes be used to recycle water and eliminate all wastewater discharges at manufacturing facilities. The State has asked for the Region's view regarding whether the CAST System could be exempted from RCRA permitting when used in this manner. The five possible scenarios for using the CAST System without wastewater discharges are shown (labeled ## 1-5) in the diagram attached to this Memorandum. The State has pointed out that treatment units which have wastewater discharges often are exempted from RCRA permitting pursuant to the "wastewater treatment unit" exemption set out in 40 C.F.R. §§ 264.1(g)(6) and 270.1(c)(2)(v). The State has pointed to an alleged "Catch 22" if the RCRA permitting exemption is lost when the environmentally beneficial step is taken of eliminating all wastewater discharges.

II. Wastewater Treatment Unit Exemption

The State has suggested that even when the CAST System is utilized so that there are no wastewater discharges, the "wastewater treatment unit" exemption should apply. See 40 C.F.R. § 264.1(g)(6). However, this exemption would not apply if the CAST System was installed in a new manufacturing facility that had never had a discharge regulated under the Clean Water Act. As the EPA clarified in the Federal Register, the exemption applies to certain ongoing operations which produce "no treated wastewater effluent as a direct result" of Clean Water Act requirements, but "is not intended to apply" to treatment units at facilities that "are not required to obtain an NPDES permit." 53 Fed. Reg. 34080-34081 (Sept. 2, 1988). See also Letter from Sylvia K. Lowrance, Director, EPA Office of Solid Waste to Thomas

W. Cervino, P.E., Colonial Pipeline Company, dated January 16, 1992, RCRA Compendium # 9522.1992(01) ("If there was never a discharge to surface waters, then the exemption criteria is not satisfied").

I have not examined whether the wastewater treatment unit exemption would apply to even all uses of the CAST System in existing facilities, since that exemption does not apply in any event to new facilities and thus does not address the State's desire to exempt the CAST System from RCRA permitting across-the-board. Moreover, I need not decide to what extent the wastewater treatment unit exemption might apply since, as explained below, I believe the State's concerns can be addressed in the particular case of the CAST System by use of the "totally enclosed treatment" exemption.¹

III. Totally Enclosed Treatment Exemption

The EPA's regulations exempt totally enclosed treatment facilities from RCRA permitting. 40 C.F.R. §§ 264.1(g)(5), 270:1(c)(2)(iv). "Totally enclosed treatment facility" is defined in 40 C.F.R. § 260.10. The State similarly exempts "treatment integral to the manufacturing process" from RCRA permitting, and defines that term in 310 CMR § 30.010.

EPA Engineer Sharon Leitch of the Region's Hazardous Waste Program section and I have examined the following documents regarding the CAST System: (i) Report to EPA on Environmental Technology Initiative Grant, by Massachusetts Department of Environmental Protection, entitled "Zero-Discharge Regulations: Evaporation and Distillation of Industrial Wastewater," Case Study no. 3; and (ii) Memorandum from Stephen Brown, Cellini Purification Systems, Inc. to Sharon Leitch, dated December 18, 1996 ("Cellini Submission") [copy attached]. Assuming that all of the representations contained in those documents are accurate, and subject to the caveats set forth below, the CAST System appears capable of meeting all of the requirements to be considered totally enclosed treatment, when used in the scenarios labeled as ## 1-5 in the diagram attached to this Memorandum:

1. A totally enclosed treatment facility must be "directly connected to an industrial production process." 40 C.F.R. § 260.10. As shown in the diagram attached to this Memorandum, scenarios ## 1-5 all envision the use of the

¹ Since I believe that the State's concerns can be resolved under the "totally enclosed treatment" exemption, I also am not examining under which scenarios the CAST System would be considered to be closed-loop recycling under 40 C.F.R. § 261.4(a)(8).

CAST System in a manner directly connected to a manufacturing process. In the Cellini Submission, the company has confirmed that it is intended that the CAST System be connected with the manufacturing operation entirely by closed pipes.

2. A totally enclosed treatment facility also must be "constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment." 40 C.F.R. § 260.10. As explained in EPA's Guidance entitled "Totally Enclosed Treatment Facility: Regulatory Clarification," RCRA Compendium # 9432.1983(01) ("Totally Enclosed Guidance"), several requirements must be met to pass this test. First, the treatment facility must be completely contained on all sides. In the Cellini Submission, the company has confirmed that this is how the CAST System is designed. Second, there must be no predictable potential for overflows and spills. For example, the system's tanks and pipes must be made of impermeable materials. The use of such impermeable materials and the many other protections against leaks and spills employed in the CAST System are documented in the attached Cellini Submission.

Finally, the system must be constructed to prevent air emissions. As confirmed in the Cellini Submission, the CAST System is designed to have no air emissions. It has no vented emissions and "CAST systems operate under nearly a full vacuum and hence do not produce any fugitive emissions." Cellini Submission, page 2.

Of course, there is always some possibility, however slight, of leaks and fugitive emissions, from any system. For example, when the CAST System is operated so as to create a product or waste (scenarios ## 2-5 on attached diagram), there could be fugitive emissions when the product or waste is removed from the system. These emissions, however, do not come directly from the treatment operation itself. In any event, while the totally enclosed treatment system exemption has been interpreted narrowly, some carefully designed systems can fall within its terms. The CAST System appears capable of meeting the test that there be "negligible potential" for emissions set forth in the EPA's "Totally Enclosed Guidance," page 7, as well as the more recently expressed tests that the system be designed not to have air emissions and be constructed and operated so as to prevent the release of hazardous constituents "not only on a routine basis but also during a process upset." 55 Fed. Reg. 25454, 25473 (June 21, 1990).

CAVEATS:

1. In this Memorandum, I am simply determining that the CAST System appears capable of meeting the tests for the totally enclosed treatment system exemption. Obviously, the manner in which this system is installed will determine whether or not the system qualifies as a totally enclosed treatment system in any particular case. For example, if the system was installed without being directly connected to an initial generator's manufacturing process, or was installed without being completely contained, the exemption would not apply. Whether the exemption will apply in any particular case also will depend on the how the system is operated. For example, the exemption could be lost if at a particular manufacturing plant, the system was not properly maintained or there were not effective protections against spills.

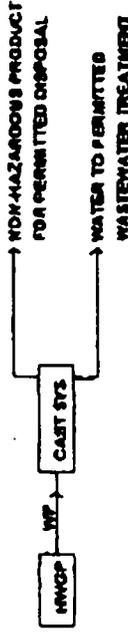
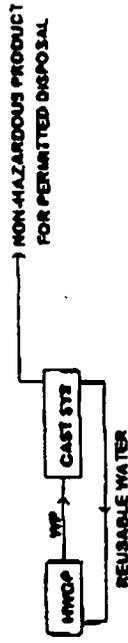
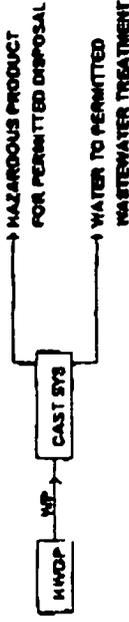
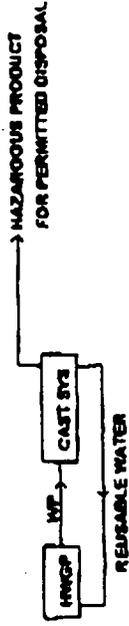
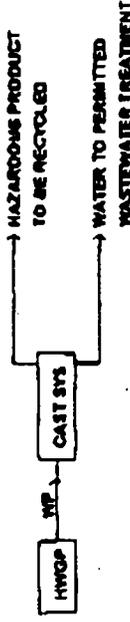
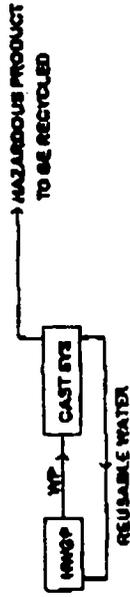
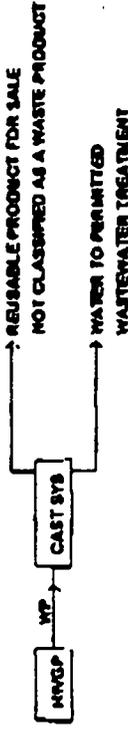
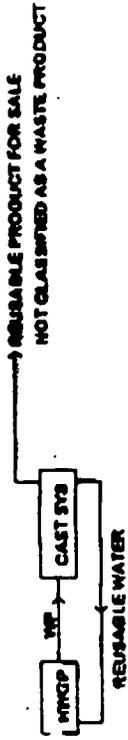
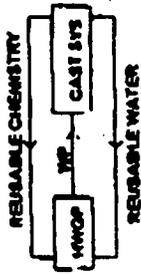
2. In this Memorandum, I am not addressing the State DEP's proposal to consider as totally enclosed, systems which have some air emissions but which meet a three part test of (i) having emission control devices which effectively prevent emissions, (ii) having in place a properly implemented leak detection program, and (iii) being in facility-wide compliance with all air requirements, including fugitive emission requirements. I also am not addressing the State's Environmental Results Program ("ERP") proposal to exempt from RCRA permitting certain facilities with up to 5 tons per year of air emissions. I need not reach these issues in this Memorandum, since the CAST System appears capable of meeting the tests for the totally enclosed treatment exemption as traditionally defined. The Region intends to work with the State on an ongoing basis on these other issues.

3. It should be emphasized that the totally enclosed treatment exemption is an exemption only from RCRA permitting for the treatment system. Other RCRA requirements will continue to apply. For example, if the CAST System generates a hazardous waste, RCRA generator requirements will apply, including manifesting if the waste is shipped off-site.

POSSIBLE CAST SYSTEM INSTALLATIONS

CAST SYS = CONTROLLED ATMOSPHERE SEPARATION TECHNOLOGY SYSTEM
 WP = WASTE PRODUCT
 HWGP = HAZARDOUS WASTE GENERATING PROCESS

no installations / fear of reopening permit



- NOTES:
1. CAST SYSTEMS UTILIZE VACUUM ASSISTED FLASH DISTILLATION
 2. CAST SYSTEMS DO NOT DISCHARGE ANY PNO DUCT TO THE AIR
 3. CAST SYSTEMS DO NOT EVAPORATE WATER INTO THE ATMOSPHERE
 4. CAST SYSTEMS CAN BE USED WITH OTHER TYPES OF TREATMENT TO RECOVER PRODUCTS FOR REUSE OR RECYCLING
 5. CAST SYSTEMS CAN BE USED WITH OTHER TYPES OF TREATMENT TO RENDER PRODUCTS NON-HAZARDOUS
 6. IN MOST CASES, CLIENTS HAVE PERMITTED WASTE TREATMENT IN ADDITION TO CAST SYSTEMS; *other wastes treated or other hazardous waste generated.*
- All have permits,*

#1
#2
#3
#4
#5

FAX TRANSMISSION SHEET

**CELLINI PURIFICATION SYSTEMS INC.
290 MOODY STREET
LUDLOW, MA. 01056-1244
(413) 589-1601
FAX (413) 589-7301
E-mail: cellini@worldnet.att.net**

To: Ms. Sharon Leitch, US EPA
Date: December 18, 1996
From: Mr. Stephen Brown, CPS
Re: Follow up on your FAX .
Page: 1 of 3

Dear Sharon,

I hope that the following explanation is sufficient to answer the questions raised by the FAX you sent and our phone conversation.

CAST™ systems are completely hard piped. All piping is welded, solvent bonded or fusion bonded to prevent leakage. All connections are flanged or fitted with unions. All flange gaskets and union o-rings are constructed from TFE, Viton, Kel-Rez or similar corrosion resistant elastomers. All pipe, fittings, vessels, etc. are constructed of CPVC, FRP, 316 SS or similar corrosion resistant materials. All pumps, heat exchangers and instruments are constructed of 316 SS, titanium, Hastelloy or similar corrosion resistant materials. The actual materials utilized are a function of the specific process chemistry and are very carefully selected to provide years of safe, corrosion/erosion resistant service.

x

- **Piping connecting a CAST™ system to a manufacturing process is always hard piped in an appropriate material. The pipe runs are always maintained within secondary containment. In most cases, this type of containment consists of a walled in sealed floor area. Double containment piping may be used if warranted.**
- X
- **CAST™ systems have no vents.**
- X
- **CAST™ systems can be connected directly to the existing manufacturing process tanks. In some instances, flow equalization tanks may be used. These tanks are always covered and constructed from an appropriate material. The solutions contained in these tanks are existing process solutions or water which will be reused in the manufacturing process.**
- X
- **CAST™ systems are primarily marketed as closed loop resource recovery systems which do not produce waste products. However, CAST™ systems are also used to recover water for reuse while reducing the overall volume of waste product generated by a manufacturing process. In this instance, the reduced quantity of waste is pumped through hard pipe to an approved container. The waste is taken off site by a licensed waste treatment/management source for recycle or approved disposal.**
- X
- **All tanks and vessels contained within a CAST™ system or connected to a CAST™ system are fitted with over flow piping, process level monitoring and HI/LOW shut down floats. Tank over flow piping is connected to appropriate storage tanks or licensed/approved waste treatment systems. All tanks and vessels contained within a CAST™ system or connected to a CAST™ system are fitted with appropriate isolation valves, drain valves, access ports and sight glasses.**
- X
- **CAST™ systems are fitted with redundant temperature, pressure, liquid level and power controls. These controls interface with the CAST™ system's electronic package. The operation of the system is fully automatic and completely fail-safe in nature. CAST™ systems are fitted with automatic isolation valves which isolate the individual sub-systems contained within the CAST™ system. Additionally, these valves are designed to prevent the accidental discharge of process solution in the event of a mechanical failure. CAST™ systems are also fitted with manually operated service valves which allow an operator to selectively isolate components for cleaning or maintenance without exposing the remaining system to atmosphere. All CAST™ system operations can be manually overridden in the event of a control system problem.**
- **CAST™ systems operate under nearly a full vacuum and hence do not produce any fugitive emissions.**

CPS would be very pleased to have you and any of your colleagues visit our plant. We currently have a small system on the shop floor which can be made available for inspection. Please feel free to call me to arrange a visit or if you have any other questions or comments. We at CPS look forward to developing a close working relationship with both the US EPA and MA DEP, and would gladly cooperate with you in any way possible. I look forward to hearing from you. Thank you.

Sincerely,

Stephen H Brown

PS Visit our Web Site at <http://www.cellnicps.com>



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOV 2 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPO

Mr. Ronald T. Taritas
Environmental Technology Corporation
1124 Morse Avenue
Schaumburg, IL 60193

Dear Mr. Taritas:

This is in response to your letter of September 19, 1988 in which you raise several questions about permit requirements as they relate to on-site treatment and wastewater treatment unit exemptions.

Under Subtitle C of the Resource Conservation and Recovery Act (RCRA), the scope of the RCRA permit requirements are detailed in 40 CFR Section 270.1(c). A RCRA permit is required for treatment, storage, or disposal of any hazardous waste. Treatment, storage, or disposal of hazardous wastes are defined as hazardous waste activities in 40 CFR Section 260.10.

Specific exclusions to the RCRA permit requirements are found in 40 CFR Section 270.1(c)(2). Generators that accumulate hazardous waste on-site in compliance with 40 CFR Section 262.34 are exempt from the requirement to obtain a RCRA permit, as specified in 40 CFR Section 270.1(c)(2)(i). The Agency currently interprets this regulatory exemption from permitting to cover storage and treatment activities in a generator's accumulation tanks or containers. The reasoning behind this policy can be found in Office of Solid Waste (OSW) memoranda dated June 17, 1986 and December 15, 1987 (copies enclosed), and preamble language in 51 FR 10168, March 24, 1986.

As I understand your letter, you are interested in applying the on-site treatment exemption for generators to the ribbon blender unit that stabilizes the listed F006 sludge, and possibly to the filter press, as well. It is important that you understand that this response is only dealing with a theoretical situation since the final determination as to whether and which RCRA regulations apply is facility-specific and, thus, must be made by the appropriate EPA Regional Office or authorized State. In the following discussion, I will deal with your Generators A and B separately.

Generator A

Your description of Generator A did not include enough detail to determine which RCRA regulations are applicable. One possibility is to assume that every unit at the facility meets the definition of a wastewater treatment unit per 40 CFR Section 260.10. If this is the case, the on-site treatment exemption for generators is not relevant since Part 264 standards (i.e., Subpart J--Tank Systems) and Part 270 permit requirements do not apply to owners and operators of wastewater treatment units, in accordance with 40 CFR Sections 264.1(g)(6) and 270.1(c)(2)(v), respectively.

For the above assumption to be correct, however, Generator A's wastewater treatment plant must be subject to regulation under either Section 402 or 307(b) of the Clean Water Act. In addition, each unit at the facility must either treat or store hazardous wastewater or hazardous wastewater treatment sludge (listed waste F006) and each unit on-site must meet the definition of a tank in 40 CFR Section 260.10. If material entering the filter press from the wastewater treatment plant is identified as a wastewater, rather than a wastewater treatment sludge (listed waste F006), the wastewater must exhibit a characteristic of a hazardous waste, such as EP toxicity for lead, cadmium, or chromium, to be identified as a hazardous wastewater. The Agency defines wastewaters as wastes that contain less than 1% total organic carbon and less than 1% total suspended solids (i.e., total filterable solids). See 53 FR 31145, August 17, 1988.

Another possibility is to assume that Generator A's facility is not subject to regulation under either Section 402 or 307(b) of the Clean Water Act. If this is the case, no units on-site are eligible for the wastewater treatment unit exemption. All units not meeting the definition of a wastewater treatment unit could be regulated as generator accumulation tanks or containers, depending on when the wastewater is identified as a hazardous waste. If the wastewater can be identified as a hazardous waste at its point of generation, the 90-day accumulation time period begins when the wastewater first enters the first unit (90-day accumulation tank or container) at the facility. Shipment of the stabilized (as specified in your letter) hazardous waste from the ribbon blender must take place within 90 days of the beginning point mentioned above.

A final possibility is to assume that all units on-site can be identified as wastewater treatment units except for either the filter press or the ribbon blender. This condition could only exist if either the filter press or the ribbon blender does not meet the definition of a tank (e.g., container) in 40 CFR 260.10. This scenario becomes much more complicated and

would best be answered by the appropriate EPA Regional Office or authorized State based on the specific facility design and operating parameters.

In any case, all tanks or containers at the facility must be in compliance with Subparts J or I, respectively, of Part 265 and Generator A must also comply with Subparts C and D of Part 265, as well as Section 265.16, as specified in 40 CFR Section 262.34. In other words, Generator A must be in compliance with all the time-frames and technical requirements outlined above and detailed in Section 262.34 to utilize the on-site treatment exemption for generators.

Generator B

Based on the information provided in your letter, the treatment of the listed waste K061 in the central accumulation tank would not require a RCRA permit provided the following conditions are met. First, from the moment Generator B places the K061 in the central accumulation tank, the K061 must be shipped off-site within 90 days. Second, the accumulation tank must be in compliance with the technical standards for hazardous waste tanks in Subpart J of Part 265. Third, Generator B must comply with Subpart C, Preparedness and Prevention and Subpart D, Emergency Procedures, of Part 265. Finally, all other regulatory requirements in 40 CFR Section 262.34 must be met by Generator B.

I want to reiterate that the above discussion addresses a theoretical situation. Facility-specific determinations as to the applicability and extent of regulation under RCRA must be made by the appropriate EPA Regional Office or authorized State. As you know, an authorized State may have more stringent regulations than those of the Federal government.

If you have further questions or need additional clarification, please contact Steve Cochran at (202) 475-8551.

Sincerely,


Sylvia K. Lowrance *for*
Director
Office of Solid Waste

Enclosures

treatment standards are expressed as concentration levels), the Agency generally bases its capacity determination on the availability of this technology, thus helping to ensure that adequate treatment capacity is currently available to treat wastes in compliance with the applicable treatment standard. For a detailed discussion of capacity, refer to section III. H.

D. "Soft Hammer" Requirements

Section III. C. of today's preamble discusses the requirements applicable to those First Third wastes for which treatment standards or effective dates have not been promulgated. Basically, the generator must demonstrate and certify that there is no practically available treatment that reduces toxicity or mobility of the waste and that disposal of these wastes in a landfill or surface impoundment unit that meets the minimum technological requirements of RCRA section 3004(o) (double liner, leachate collection system, and ground water monitoring) is the only practical alternative. If treatment is practically available, the generator must certify that his waste is being treated by the best treatment (i.e., the treatment which provides the most environmental benefit) practically available, as indicated in his demonstration. The residuals from treatment of "soft hammer" wastes remain "soft hammer" wastes, and if disposed in a landfill or surface impoundment unit, must be placed in a unit meeting the minimum technological requirements of 3004(o) (including section 3004(o)(2) if an appropriate demonstration can be made).

E. Reinterpretation of RCRA Section 3004(h)(4)

As discussed in section III. D., the Agency is promulgating its reinterpretation of RCRA section 3004(h)(4) as presented in the April 8, 1988, proposal. This interpretation effects the disposal of restricted wastes which have been granted an extension to the effective date (either a national capacity variance or a case-by-case extension) in a landfill or surface impoundment. Under the interpretation promulgated today and effective on November 8, 1988 (during the interim period, the original interpretation applies), if such restricted wastes are disposed in a landfill or surface impoundment unit, the individual landfill or surface impoundment unit must meet the minimum technological requirements of RCRA section 3004(o).

F. "No Migration" Requirements

As discussed in section III. F., the Agency is today promulgating amendments to 40 CFR 268.6, the "no migration" petition process. As proposed on April 8, 1988, these amendments cover the demonstrations required in the petition and certain other requirements on the owner or operator of a waste management unit that is subject to a "no migration" variance.

G. Nonrulemaking Procedures for Site-Specific Variances From the Treatment Standard

The Agency is promulgating amendments to the existing 40 CFR 268.44 to modify the procedures for obtaining site-specific variances from the treatment standard. This action is taken in response to commenters' request for a more streamlined procedural mechanism for obtaining a variance from the treatment standard. EPA believes that, in certain cases, informal rulemaking are neither required nor warranted, and that a more streamlined procedure for obtaining a variance from the treatment standard is justified. This approach is discussed in more detail in section III. K. of today's preamble.

III. Detailed Discussion of Today's Final Rule

A. Determination of Treatability Groups and Development of Treatment Standards

1. Waste Treatability Groups

For the First Third wastes, EPA used the individual listed waste codes as the starting point for developing waste treatability groups. In cases where EPA believed that wastes represented by different codes could be treated to similar concentrations using identical technologies, the Agency combined the codes into one treatability group. EPA based its initial treatability group decisions primarily on whether the waste codes were generated by the same or by similar industries from similar processes. EPA believes that such groupings can be made because of the high likelihood that the waste characteristics which affect treatment performance will be similar for these different waste codes. This conclusion is explained in more detail in the relevant background document for each particular waste code.

The treatment standards in today's rule generally contain concentrations presented constituent by constituent for "wastewaters" and for "nonwastewaters". The treatment standards apply to the wastes as

generated as well as all of the residual wastes generated in treating the original prohibited waste. See RCRA section 3004(m)(2) indicating that treatment standards apply both to wastes and treatment residuals therefrom. Thus, for example, all K101 and K102 wastes (including the solid residuals generated from treating K101 and K102) would have to meet the treatment standards for nonwastewaters and all wastewaters (including those generated from treating these wastes) would have to meet the treatment standards for wastewaters. For the purpose of defining the applicability of the treatment standard in this rule, the Agency defines wastewaters as wastes that contain less than 1% total organic carbon (TOC) and less than 1% total suspended solids (i.e., total filterable solids) except for those wastes identified as F001, F002, F003, F004, and/or F005 where the Agency indicated a different definition of the solvent wastewater treatability group (see 51 FR 40579 for the definition of a solvent-water mixture). Those wastes that do not meet this definition are considered to be nonwastewaters. A facility is not allowed to dilute or perform partial treatment on a waste in order to switch the applicability of a nonwastewater standard to a wastewater standard or vice versa.

However, EPA wishes to emphasize that where a waste that consists primarily of water (such as a leachate) is classified as a nonwastewater solely by its filterable solids content (i.e., total suspended solids (TSS) levels), the waste can be subjected to dewatering techniques to remove the filterable solids. Treatment standards for nonwastewaters are then applicable to the filtered solids. The filtrate is then subject to the treatment standards for the wastewaters, assuming that the filterable solids content has been reduced to less than one percent by weight. These standards are applicable if the wastes are to be placed in land disposal units, according to the appropriate provisions of today's rule.

2. Identification of BDAT

A detailed discussion of the Agency's general methodology for establishing BDAT standards is provided in 51 FR 40572 (November 7, 1986). Section III. A. of today's preamble discusses the specific application of the methodology to the First Third wastes, and provides summary of some of the principal elements of the BDAT methodology.

Consistent with the general methodology, EPA first determines which technologies were

View Record Detail

Faxback 11173
9441.1986(62)

AUG 19 1986

Mr. William R. Blackburn
Counsel
Travenol Laboratories Inc.
Deerfield, Illinois 60015

Dear Mr. Blackburn:

This letter is in response to your letters dated July 19, and August 26, 1985, and your August 28, 1985, telephone conversation with Alfred W. Lindsey, then the Deputy Director of the Waste Management and Economics Division, and additional conversations with members of my staff. Your questions concerned the treatment of characteristic hazardous waste in pipelines that lead to a privately-owned wastewater treatment plant.

In a letter dated July 27, 1981, Mr. Lindsey responded to related inquiries made by Mr. Ronald E. Meissen of your company. This response included a copy of a seven-page regulatory clarification statement on the definition of "Totally Enclosed Treatment Facility." A copy of this statement is enclosed for reference.

In your letter dated July 19, 1985, you stated that "...if these characteristic hazardous wastes are poured to the sewer from a laboratory, such disposal would be permissible so long as the one-percent rule of 40 CFR 261.3(a)(2)(iv)(E) is met." This is an inaccurate interpretation of the rule. The rule does not refer to the permissibility of disposal but rather to whether the wastewater containing listed wastes is a hazardous waste or not. The provision does not apply where characteristic wastes are involved, even if the waste is from a laboratory. Mixtures containing only characteristic and nonhazardous wastes are hazardous only if the mixture exhibits the characteristic according to 261.3(b)(3). In sum, 40 CFR 261.3(a)(2)(iv)(E) is not relevant to the issue you raise. At this time, there is no on-going effort to create a de minimis mixture rule for characteristic hazardous waste.

From your description of the process, small parts are dipped into 50% alcohol/50% water mixture in small trays. This is a batch operation that occasionally requires the operators to carry the trays with spent dip solution to the drain. About

12 gallons per day of the waste are poured down the drain that

-2-

leads to an industrial wastewater treatment plant that handles 1.8 million gallons a day. You have stated that your biological treatment plant biodegrades the alcohol prior to discharge.

The following are specific responses to the questions in your letters:

Issues from the July 19, 1985 letter

(A) Does the dilution of noncorrosive, unlisted, characteristic hazardous waste to a nonhazardous condition constitute hazardous waste treatment if the dilution occurs in a sewer line leading to an industrial wastewater treatment plant after the waste is poured to the drain from a container?

Treatment is defined in 260.10 as "...designed to change the physical, chemical, or biological character or composition of any hazardous waste...to render such waste nonhazardous, or less hazardous; safer to transport, store, or dispose of..." Pouring the 50% water/50% alcohol ignitable waste down the drain renders the waste nonhazardous by the time it reaches the treatment plant. In this case, pipes are designed and used to convey, not treat, wastes to the biological treatment plant that degrades the alcohol. Thus, the dilution is incidental to the transport of the waste to the wastewater treatment plant where treatment takes place. Therefore, in this case the dilution is not treatment; and, if properly handled, this practice can be environmentally more acceptable than storing drums of the ignitable waste for off_side treatment or recycling.

(B) If the answer to (A) is "yes" (dilution is treatment), does the sewer line in which the waste is treated serve as (1) a "wastewater treatment unit;" (2) a "totally enclosed treatment facility;" or (3) any other type of exempt hazardous waste treatment facility?

Since dilution is not considered to be treatment when the characteristic waste is diluted while being conveyed to acceptable treatment, these questions are not applicable. Furthermore, once the waste stream is so diluted as to be rendered nonhazardous, treatment of the nonhazardous waste stream that occurs in the wastewater treatment plant is not subject to RCRA regulations.

(C) If the answer to (A) is "yes" (diluting characteristic waste

in a sewer line is treatment), and there is no exemption for the treatment in (B), what provisions of 40 CFR 264 and 265 govern the pipeline treatment?

The question is not applicable for the reasons explained above.

-3-

(D) If the waste is diluted in the sink prior to discharge down the drain, is the sink a "wastewater treatment unit?"

If hazardous waste is diluted in the sink, it is hazardous waste treatment, since the dilution is intentional, rather than merely incidental to conveyance to the treatment plant. Intentional dilution of waste prior to discharge to decrease its incompatibility, ignitability, reactivity, etc., in the pipelines constitutes treatment.

Since your 50% water/50% alcohol waste is not a wastewater by our guidance of a few percent contaminants (see the February 2, 1982, notice, 47 FR 4707), the sink is not a wastewater treatment unit.

Issues from the August 26, 1985, letter

(A) If corrosive hazardous waste from water deionization units travels through an open channel within the building to the sewer leading to an industrial wastewater treatment plant, does the neutralization of that waste in the sewer mean that the sewer is: (1) a totally enclosed treatment facility; (2) an elementary neutralization unit; or (3) a wastewater treatment unit? (4) Does the answer change if the channel is enclosed?

(1) No. An open sewer is not totally enclosed on all sides in accordance with Agency guidance.

The issue you raise is whether or not an open sewer in a building can be a totally enclosed treatment facility. Spills within the building can release hazardous constituents into the air or cause a release that leaves the confines of the building. Therefore, systems that can release hazardous constituents within buildings are not considered totally enclosed.

(2) Tanks are defined in 260.10 as: "a stationary device designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials...which provide structural support." According to the preamble of the proposed permit-by-rule in the November 17, 1980, Federal Register (45 FR

76078), the elementary neutralization unit "...is intended to include...tanks as well as devices such as flumes, gutters, throughs [sic] and pipes which are not commonly considered to be tanks, but which nevertheless meet the expansive definition of tank in 260.10." Although this preamble language was only included in the proposed permit-by-rule regulations, the Agency is applying this interpretation of tank to the exclusions in 265.1(c)(10), 264.1(c)(6), and 270.1(c)(2)(v) as well.

-4-

From the information you provided, the sewer qualifies for the elementary neutralization unit exclusion. The in-line neutralization system adds caustic to wastes that are only hazardous on the basis of corrosivity, and it meets the definition of an elementary neutralization unit (as defined in 260.10) for the reasons described above. In this case, neutralization is treatment rather than dilution incidental to the transport of waste as described in the July 19, 1985 letter.

Although the open channel is upstream of the neutralization, the channel is not subject to RCRA regulation as a tank, because it is part of the neutralization system. Elementary neutralization units may consist of a series of tanks, just as wastewater treatments may involve a series of connected tanks.

(3) The sewer is possibly a wastewater treatment unit if it meets the three criteria outlined in 40 CFR 260.10. First, the waste is a wastewater for RCRA purposes (i.e., contains at most a few percent material other than water, 47 FR 4707). You said that the corrosive waste is 95% water and 5% total dissolved solids, so the corrosive waste appears to meet the Federal criteria of a wastewater for the RCRA wastewater treatment exclusion. Second, the facility is subject to control under Section 402 or 307(b) of the Clean Water Act. And third, the units meet the definition of tank in 260.10. For the purposes of the exclusion, the pipes are tank like for the same reason that pipes can be part of an elementary neutralization unit. Since Mississippi has jurisdiction over your facility, you must ask the State if your facility is eligible for a wastewater treatment exclusion.

(4) Enclosing the channel would possibly change the answer to (1), i.e., whether or not it is a totally enclosed treatment facility. However, enclosing the channel may not be sufficient to create a totally enclosed treatment facility unless you comply with the enclosed guidance and any additional guidelines from the Mississippi Department of Natural Resources.

(B) If the corrosive hazardous waste in (A) is piped directly

from the deionization units to an enclosed tank where it is pretreated to bring the pH near, but not to, the non-hazardous range and then discharged via pipe to the sewer for final neutralization by dilution with wastewater, does the piping, tank, and sewer constitute a totally enclosed treatment facility?

Possibly. The Mississippi Department of Natural Resources would have to review the details of design and operation of the system to conclude that it does meet their criteria for totally enclosed treatment.

-5-

According to further discussions you had with my staff, the corrosive waste from the deionization units will for the short term be managed according to scenario "A" in your August 26, 1985, letter, which meets the EPA criteria for either elementary neutralization or wastewater treatment. (However, the facility is subject to State regulation.) For the purposes of determining the applicability of the small quantity generator exclusion of 261.5, our regulatory approach does not count waste until it is subject to regulation. The waste is not subject to regulation in the deionization unit in which it was generated according to 261.4(c) nor in the exempted neutralization process. Since there is no hazardous waste leaving the sewer, the corrosive waste from the deionization unit is not counted towards the waste exceeding 1,000 Kg a month. This policy is explicitly outlined in the 261.5(c) small quantity generator regulations promulgated March 24, 1986 (56 FR 10174).

The additional information you provided by telephone leaves serious questions about whether you can design a totally enclosed system and still meet your Food and Drug Administration requirements. However, scenario "B" still qualifies as an elementary neutralization unit and, as explained above, the corrosive waste does not count towards the small quantity generator limits, because the waste has not yet become subject to regulation. In other words, you do not have to be a totally enclosed treatment facility in order to qualify for small quantity generator status.

I appreciate your patience for the length of time it took EPA to address the policy issues raised by your request. Please address any questions on this response to Irene Borner of my staff at (202) 382-7917.

Sincerely,

Original Document signed

John P. Lehman
Director
) Waste Management and
Economics Division

Enclosure

cc: James Scarbrough, Region IV
Jack McMillan, Mississippi DNR

owners and operators of wastewater treatment units, should include requirements for a general waste analysis (40 CFR 264.13), and for contingency plan and emergency procedures (40 CFR Part 264, Subpart D). They further identify the waste analysis, the development of a waste analysis plan, and the personnel training requirements as the most critical requirements that should be incorporated into the Part 266-Standards. NSWMA also expresses concern about possible ambiguities in the regulation of hazardous sludges generated in wastewater treatment units and contends that the sludges should be subject to the full RCRA Subtitle C regulations up to and including final disposal.

Copies of NSWMA's written statements are available for inspection in the RCRA public docket room.

Definition of Wastewater Treatment Unit

EPA has received a number of inquiries regarding the interpretation of "wastewater" as used in the definition of wastewater treatment unit. The Agency intends that only units legitimately engaged in treating a relatively dilute aqueous based waste be covered by the definition of wastewater treatment unit and is concerned that the definition not be interpreted so broadly as to include virtually any treatment operation that treats any liquid waste.

The Agency considered trying to define wastewater in terms of a percentage of water but encountered great difficulty in developing a workable and defensible definition. As an interim measure, the Agency in a July 31, 1980 letter to EPA regional offices advised that wastewater be interpreted to refer to "wastes which are substantially water with contaminants amounting to a few percent at most." EPA found this interpretation brought further inquiries. EPA is now considering using the term "process waste water." In the definition of wastewater treatment unit to help clarify the meaning of wastewater. The term process wastewater, as defined in 40 CFR 122.3 and 401.11(q) means:

any water which, during manufacturing or processing, comes into direct contact with or from the production or use of any raw material, intermediate product, finished product, by-product, or waste product.

The Agency believes that the term process wastewater effectively limits the scope of the regulation and provides a basis for the body of experience that has developed in applying the term, a degree of certainty in the

meaning of wastewater treatment unit. For example, under this definition, process solutions such as solvents or acids which during manufacturing or processing come into direct contact with a product would not be considered a process wastewater, regardless of the percentage of water in the solvent or acid.

EPA invites comment on the use of the term "process wastewater" to help clarify the meaning of "wastewater treatment unit." The Agency also welcomes suggestions on how wastewater might otherwise be defined.

Dated: January 26, 1982.

Christopher J. Capper,
Acting Assistant Administrator

(FR Doc. 82-2839 Filed 2-1-82; 8:45 am)
BILLING CODE 6560-50-M

GENERAL SERVICES ADMINISTRATION

41 CFR Part 101-41

Refunds From Carriers for Unused Transportation Services

AGENCY: General Services Administration.

ACTION: Proposed rule.

SUMMARY: The General Services Administration (GSA) proposes to amend the Federal Property Management Regulations to further revise and improve the procedures regarding refunds from carriers for exchanged tickets (traveler exchange of an original ticket for one of lesser value) and the redemption of unused tickets (tickets that have not been exchanged and on which no portion of travel has been performed). Compliance with these revised procedures by Government agencies and the carrier industry will expedite the recovery of outstanding refunds due the U.S. Government.

DATE: Comments must be received by March 4, 1982.

ADDRESS: Written comments should be sent to the General Services Administration (TACP), Washington, D.C. 20406.

FOR FURTHER INFORMATION CONTACT: John W. Sandfort, Chief, Reports and Procedures Branch, Office of Transportation Audits (202-275-0864).

SUPPLEMENTARY INFORMATION: The GSA has determined that this rule is not a major rule for the purposes of Executive Order 12291 of February 17, 1981, because it is not likely to result in an annual effect on the economy of \$100 million or more; a major increase in costs to consumers or others; or

significant adverse effects. The GSA has based all administrative decisions underlying this rule on adequate information concerning the need for, and consequences of, this rule; has determined that the potential benefits to society from this rule outweigh the potential costs and has maximized the net benefits; and has chosen the alternative approach involving the least net cost to society.

GSA proposes to amend Title 41, Part 101-41 of the Code of Federal Regulations (41 CFR Part 101-41) as follows:

PART 101-41—TRANSPORTATION DOCUMENTATION AND AUDIT

1. The table of contents for Part 101-41 (101-41.210—101-41.210-6) is amended by revising Subpart 101-41.210.

Subpart 101-41.2—Passenger Transportation Services Furnished for the Account of the United States

Sec. 101-41.210 Unused transportation refund procedures.

101-41.210-1 Ticket exchanges.

101-41.210-1a Agency monitoring and processing of exchanged ticket refunds.

101-41.210-2 SF 1170, Redemption of unused tickets (tickets that have not been exchanged and on which all or some portion of travel remains unperformed).

101-41.210-3 Agency processing of SF 1170.

101-41.210-3a Carrier processing of SF 1170.

101-41.210-4 Agency processing of SF 1170 refunds.

101-41.210-5 Report of carrier failure to make refund on SF 1170 demands.

101-41.210-5a Carrier refund when SF 1170 has not been received.

101-41.210-5b Payment to carrier for subsequent use of ticket for transportation or second refund through the use of an SF 1170 after initial refund to GSA for unused expired ticket.

101-41.210-5c Agency recovery of carrier refunds sent direct to GSA.

101-41.210-6 Refund procedures covering unused transportation services billed by foreign-flag carriers.

Authority: 31 U.S.C. 244 and 40 U.S.C. 486(c).

Subpart 101-41.2—Passenger Transportation Services Furnished for the Account of the United States

Section 101-41.210 is revised to read as follows:

§ 101-41.210 Unused transportation refund procedures.

Agencies shall not revise carrier bills or require carriers to rebill items except as provided in § 101-41.210-6, to recover from carriers the value of unused or unfurnished transportation.

Wastewater Treatment Act of 1981

by these regulations are in place, and the visible emission requirements of COMAR 10.18.10.03B (1), (2), (4), and (5) were in effect as of October 10, 1981, the regulation's effective date.

3. EPA noted that the PFC delays enforceability of the mass emission standard for coke oven combustion stacks due to problems in the current test method. The agency requested that Maryland assure EPA in writing that alternate testing procedures developed for the particulate sampling method be submitted as a SIP revision no later than December 31, 1982.

Maryland pointed out that the PFC calls for an alternative test procedure for the particulate sampling method at the coke oven combustion stacks to be finalized by December 31, 1982. The State of Maryland anticipates no problem at the present time complying with this requirement and intends to submit the final test procedures to EPA as a SIP revision as soon as the procedure is finalized, which should be prior to December 31, 1982.

4. EPA's review revealed that the PFC allows the development of an alternate visible emission standard for the Basic Oxygen Furnaces (BOF) when reasonable controls are in place. It also states that the installation may occur in two stages. The agency has informed the State that an interim visible emission standard must be developed for the first stage.

Maryland stated that the PFC provides that the Department could require additional controls at the BOF Shop beyond those required in the Plan to be utilized by December 31, 1982. Should this occur, the State of Maryland commits to develop an interim visible emission standard for the BOF Shop and to submit it to EPA as a SIP revision no later than December 31, 1983.

Therefore, EPA proposes to approve new iron and steel regulations (COMAR 10.18.10), the new Technical Memorandum TM-AMA 81-04, the new method 13 to be added to TM-AMA 2-116, the amended COMAR 10.18.01 and COMAR 10.18.06, and the Amended Plan for Compliance (considering the necessary changes) for the Bethlehem Steel Corporation's Sparrows Point, Maryland plant.

Based upon the above evaluations, the Administrator is proposing to approve the revision to the Maryland State Implementation Plan as discussed in this case.

The public is invited to submit comments on whether these regulations should be approved as a revision to the Maryland State Implementation Plan.

The Administrator's decision to approve or disapprove the proposed revision will be based upon the comments received and on a determination as to whether they meet the requirements of Part D of Title I and Section 110(a)(2) of the Clean Air Act. The Office of Management and Budget has exempted this rule from the requirements of section 3 of Executive Order 12291.

Pursuant to the provisions of 5 U.S.C. 605(b), the Administrator has certified that SIP approvals under Sections 110 and 172 of the Clean Air Act will not have a significant economic impact on a substantial number of small entities. See 46 FR 8709 (January 27, 1981). This action, if promulgated, constitutes a SIP approval under Sections 110 and 172 within the terms of the January 27, 1981 certification. This action only approves State actions. It imposes no new requirements.

Dated: December 9, 1981.

Peter N. Bibko,
Regional Administrator.

[FR Doc. 82-3000 Filed 2-1-82; 9:45 am]
BILLING CODE 6560-50-01

40 CFR Parts 122, 260, 264, 265, and 266

[SWH-FRL-2040-8]

The Hazardous Waste Permit Program; Hazardous Waste Management System: General Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities; Standards for the Management of Specific Wastes and Specific Types of Facilities; Reopening of Comment Period on Proposed Regulations

AGENCY: Environmental Protection Agency (EPA).
ACTION: Reopening of comment period on proposed regulations.

SUMMARY: This notice reopens the comment period on a portion of EPA's November 17, 1980 proposed hazardous waste management and permitting regulations for wastewater treatment units (45 FR 76076). EPA is taking this action in order to allow the general public an opportunity to comment on issues raised by the National Solid Waste Management Association (NSWMA) in the course of settlement negotiations in *AMAX Inc. v. EPA* and to comment on a revision in the definition of "wastewater treatment unit."

DATE: EPA will accept comments on the issues discussed in this notice until March 4, 1982.

ADDRESSES: Comments should be addressed to Deneen M. Shrader, Docket Clerk, Office of Solid Waste (WH-562), U.S. Environmental Protection Agency, 401 M Street S.W., Washington, D.C. 20460, telephone (202) 755-9173. Comments should identify the regulatory docket as: "Section 3004—Wastewater Treatment Units."

The public docket for this rulemaking is located in Room 2711, U.S. Environmental Protection Agency, 401 M Street S.W., Washington, D.C. 20460 and is available for viewing from 8:00 a.m. to 4:30 p.m., Monday through Friday.

FOR FURTHER INFORMATION CONTACT: Howard M. Cohen, Hazardous and Industrial Waste Division, Office of Solid Waste (WH-565), U.S. Environmental Protection Agency, Washington, D.C. 20460, telephone (202) 755-4650.

SUPPLEMENTARY INFORMATION: On November 17, 1980 (45 FR 76076) EPA proposed special regulations applicable to owners and operators of "wastewater treatment units." The proposed regulations were intended to reduce the regulatory burden on a class of facilities which pose less of a risk to human health and the environment than other types of hazardous waste management facilities. EPA incorporated many but not all of the Part 265 operating requirements into these proposed standards and provided for a simplified permitting process by granting qualified facilities a permit-by-rule.

On November 17, 1980 EPA also temporarily suspended the applicability of the hazardous waste management and consolidated permit regulations to wastewater treatment units pending finalization of the proposed special standards. Pursuant to Section 7006 of the Resource Conservation and Recovery Act (RCRA) several persons petitioned the United States Court of Appeals for the District of Columbia for review of this action, *AMAX, Inc. v. EPA*, Nos. 81-1171 and 81-1172.

In the course of settlement negotiations in *AMAX, Inc. v. EPA* several issues related to the proposed regulations and offered to submit to the Agency a supplemental letter outlining their position. Other petitioners present at the negotiations asked for an opportunity to comment on the issues raised by NSWMA. In light of these events EPA has decided to reopen the public comment period to allow for a full airing of these issues and has summarized NSWMA's comments in the following paragraph.

NSWMA contends that the proposed Part 266 standards...

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 27 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPOMEMORANDUM

SUBJECT: RCRA Regulation of Pesticide Rinseate
Treatment/Recycling System

FROM: Sylvia K. Lowrance, Director
Office of Solid Waste (OS-300)

TO: David A. Wagoner, Director
Waste Management Division
EPA Region VII

This memorandum is in response to your September 15, 1988 memorandum requesting clarification of the RCRA regulation of certain tanks in a pesticide container washing operation.

As I understand the process, the rinsewater from the container washing is collected in a sump, is then pumped to a settling tank, and subsequently treated with activated carbon. The treated rinsewater is reused for container rinsing, but the pesticide residues are discarded.

Your interpretation that the used rinsewater is a "spent material" is correct; as a spent material going for treatment (or reclamation), it is a solid waste. If the used rinsewater contains a pesticide listed in 40 CFR 261.33 that was not derived from an "empty" container as defined in Section 261.7, the used rinsewater is a hazardous waste. If the pesticides do not meet a listing, the used rinsewater is a hazardous waste if it exhibits a characteristic (Section 261.20-261.24).

Although the system does have certain characteristics of a reclamation operation, it is more clearly defined as a wastewater treatment unit. As stated in your memo, this unit would be subject to RCRA permit requirements unless exempted under the wastewater treatment unit exemption at 40 CFR 264.1(g)(6) or 265.1(c)(10). In a September 2, 1988 Federal

Register notice, the Agency clarified that this wastewater treatment unit exemption is intended to cover only tank systems that are part of a wastewater treatment facility that (1) produces a treated wastewater effluent which is discharged into surface waters or into a POTW sewer system and, therefore, is subject to the NPDES or pretreatment requirements of the Clean Water Act, or (2) produces no treated wastewater effluent as a direct result of such requirements. This exemption is not intended to apply to wastewater treatment units that are not required to obtain an NPDES permit because they do not discharge treated effluent (see 53 FR 34080-81). As your memo explains, the treated rinsewater is completely recycled back into the operation and no discharge occurs. I cannot conclusively determine whether the unit would be eligible for an exemption as a wastewater treatment unit; that determination must be made by the authorized State or Regional office. In making this determination, the authorized State or Regional office must determine whether the facility is subject to regulation under Sections 307(b) or 402 of the Clean Water Act.

Regarding the regulatory status of the "reclaimed" rinsate, you cited the January 4, 1985 Federal Register preamble (50 FR 634) discussion of products from recycling operations losing their status as a waste. While the regulatory language allows for flexibility in determining whether a reclaimed waste may be considered a product (thus losing its status as a waste), the preamble discussion indicates that reclaimed wastewaters are not to be considered products. The reasons for this approach (i.e., that wastewaters are not ordinarily considered to be commercial products and are often discharged, and that the Agency did not intend to allow facilities to exempt their wastewater treatment surface impoundments from regulation by being classified as "recycling" facilities) are not necessarily applicable in this case. When reused, the reclaimed rinsate would lose its status as a solid waste as provided in 40 CFR 261.2(e)(1)(ii), provided it is truly reclaimed as an effective substitute for what is typically used to rinse the containers. Until it is reclaimed and fit for reuse, the rinsate would remain a solid waste, and, if applicable, a hazardous waste.

If you have any further questions or need any additional clarification, you should contact Mitch Kidwell at FTS 475-8551.

cc: Michael Feeley
Chief, Waste Programs Branch
EPA, Region IX

Karen Schwinn
Chief, Waste Compliance Branch
EPA, Region IX

Waste Management Division Directors
Regions I-X

APPENDIX G

November 28, 1986

9483.1986(09)

MEMORANDUM

SUBJECT: Regulatory Interpretations for Tooele's Wastewater Treatment System

FROM: Marcia E. Williams, Director
Office of Solid Waste

TO: Robert L. Duprey, Director
Waste Management Division
EPA Region VIII

Thank you for the information regarding implementation of the July 14, 1986 tank regulations at Tooele Army Depot. In general, your staff has demonstrated both a comprehensive and accurate understanding of the Subpart J requirements and their applicability to a wastewater (hazardous waste) treatment system. As you suggest, we will consider using the Region's interpretations as examples in our proposed question and answer brochure.

We do offer the following comments on the Region's technical interpretations and applicability determinations. Our comments elaborate on three of the four answers provided in Nathaniel Miullo's November 5 memo to Dr. Parker. We are delaying comments on question #2 because the issue of the applicability of RCRA to pipe systems associated with wastewater treatment units is under legal review by the Office of General Counsel (OGC). We will provide a response to question #2 as soon as OGC provides a determination. Our response to the other questions follow:

Question #1: Does a wastewater treatment system, qualifying as a wastewater treatment unit, need to meet the new tank rules for secondary containment, etc.?

The Region's determination is comprehensive and correct for the case where the wastewater treatment system does not qualify as a wastewater treatment unit. Where a system qualifies as a wastewater treatment unit, 40 CFR 264.1(g)(6) excludes such "unit" from the permitting process. Also, this exemption would normally be extended to storage of wastewater before entering the wastewater treatment unit. It is our understanding that Tooele may apply for classification as a wastewater treatment unit. The information we received does not appear to support such a

This has been retyped from the original

classification, but possibly they may have additional information we are not aware of.

Question #2: Does the definition of a closed loop exclusion apply to wastewater system Alternative A?

The Region's response is very good here. Additionally, to meet the closed loop exclusion the reclaimed material must be returned for reuse in the production process (not apparently the case here). By production process, the Agency means those activities that tie directly into the manufacturing operation or those activities that are primary to the operation at an establishment. It does not include ancillary or secondary activities that are carried out as part of the total activities. Given this, recycled water generally would not be considered a secondary material. (See 51 FR 25442.)

Question #3: Can a manhole in a wastewater distribution system be classified as a tank?

The Region's response suggests that manholes (sumps) if used as part of the secondary containment system, would be subject to the secondary containment requirements of 40 CFR 264.193(b). This is not true as 40 CFR 264.190(b) exempts tanks, including sumps, that serve as part of a secondary containment system from the requirements of §264.193. Secondary containment tanks/sumps must comply with all of the standards of Subpart J, except 264.193.

We appreciated the opportunity to review the Region's determination/interpretation relating to Tooele's wastewater treatment proposal. Should you have any questions concerning this review please feel free to call Chet Oszman in the Storage/Incinerator (PAT) at (FTS) 382-4499.

cc: Bruce Weddle
Jack Lehman
Susan Sawtelle
Mark Greenwood
Mat Miullo