



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

NOV 30 1992

RECEIVED

DEC 16 1992

LEGAL PARTMENT



1402
General

Mr. Ralph R. DeFeo
Corporate Counsel
M G Industries
P.O. Box 849
Morrisville, PA 19067

Dear Mr. DeFeo:

Thank you for your letter of November 12, 1992, requesting an update, if any, of our position regarding your intention to purchase existing compressed gas cylinders from Los Alamos National Laboratory (LANL) and process the hazardous residues removed from these cylinders at your Pennsylvania facility.

The position taken in our July 1, 1991, letter to you has not changed. We understand that you intend to reuse the purchased cylinders in a manner consistent with a permit you have for such activities, issued by the State of Pennsylvania. We do not believe that such reuse triggers RCRA solid waste regulation.

Should you have any further questions regarding this issue, please contact Mr. Joseph Schultes, of my staff at (214) 655-2192.

Sincerely yours,

Allyn M. Davis

Allyn M. Davis, Director
Hazardous Waste Management Division (6H)

cc: EPA Region 3 (Mary Letzkus) (3HW-62)
NMED
Harry T. Season, Jr. (LANL)



4068

Mr. Ralph R. DeFeo
Corporate Counsel
M G Industries
P.O. Box 849
Morrisville, PA 19067

Dear Mr. DeFoe:

This is in response to your letter of October 28, 1992, requesting an update, if any, of our position regarding your intention to purchase existing compressed gas cylinders from Los Alamos National Laboratory (LANL) and process the hazardous residues removed from these cylinders at your Pennsylvania facility.

Our earlier positions, from letters generated on October 5, 1990, and July 1, 1991, are current and consistent with the situation presented. The October 5th letter to LANL responded to a situation under which cylinders partially filled with compressed gaseous materials listed or exhibiting characteristic properties of a hazardous substance where LANL intended to take a disposal action requiring management under 40 CFR Parts 261 and 262. The July 1st letter to MG Industries responded an intent to purchase these LANL cylinders for reuse through a process permitted by a Pennsylvania authorized activity. This purchase for reuse action is not subject to RCRA authority.

Should you have any further questions regarding this issue, please contact Mr. Joseph Schultes, of my staff at (214) 655-2192.

Sincerely yours,

Allyn M. Davis, Director
Hazardous Waste Management Division (6H)

cc: Region 3

bcc: J. Schultes

6H-CS:JVS:mrw:11/03/92:5-2192:USMexDisk#1a:doc.497
FILE CODE: _____

6H-CS ROMO	6H-CS POTTS	6H-CS TILMORE 11/12/92	6H-C GLOVER	6H-C BROWN 11/12	6H GERSH	6H DAVIS
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MALVERN, PA 19355-1424
215-695-7400 FAX 215-695-7600



Office of the
General Counsel

VIA FEDERAL EXPRESS

Direct Fax No.
215-695-7596

October 28, 1992

Mr. Allyn M. Davis
Director, Hazardous Waste Management Division (6H)
U.S. Environmental Protection Agency - Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Re: Compressed Gas Cylinders

Dear Mr. Davis:

Approximately one and one half years ago, by letter dated May 7, 1991 (a copy of which is attached for your convenience), I wrote to you concerning a program which MG Industries was then proposing. Specifically, MG desired to purchase existing compressed gas cylinders from Los Alamos National Laboratory, transport the cylinders to MG's facility in Pennsylvania, process the residues removed from the cylinders, and return the cylinders to active use in MG's cylinder population. I questioned whether or not the proposed program would be subject to RCRA regulations, and your reply, dated July 1, 1991 (a copy of which is attached), indicated that it would not.

Since that time, for various unrelated reasons, no cylinders have left Los Alamos for Pennsylvania, yet we hope to begin the process very soon. However, an employee of Los Alamos, with responsibility for environmental matters, has now questioned the continuing validity of your one and one half year old response. I would appreciate a brief letter from you confirming that your position remains unchanged. Hopefully, after review of the letter, we can finally proceed with the program.

Thank you for your anticipated cooperation and prompt response.

Sincerely,


Ralph R. DeFeo
Corporate Counsel

Enclosures
RDF/rdt
LEGAL\NEPA

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OCT 29 1992
EPA REGION 6
1445 ROSS AVENUE
DALLAS, TEXAS 75202-2733



2460 Boulevard Of The Generals • P.O. Box 945 • Valley Forge, Pennsylvania 19482 • 215/630-5400 Telex 846482

Office of the
General Counsel

May 7, 1991

Direct Dial No.
215/630-5404

Mr. Allyn M. Davis
Director, Hazardous Waste Management Division (6H)
United States Environmental Protection Agency
Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Re: Los Alamos National Laboratory
Compressed Gas Cylinders

Dear Mr. Davis:

On September 13, 1990 Mr. Harry T. Season, Jr., the then Acting Area Manager for the Department of Energy's Los Alamos Area Office, wrote to you concerning the management of compressed gas cylinders that are owned by the DOE and located at the Los Alamos National Laboratory (a copy of the letter, marked Appendix A, is attached for your convenience). Mr. Season indicated that certain vendors had expressed an interest in buying those cylinders and utilizing them in their inventory. Indeed, MG Industries has approached the Los Alamos National Lab with the proposal of purchasing certain of their cylinders.

MG Industries is a compressed gas manufacturer with its headquarters located in Valley Forge, Pennsylvania, and a cylinder fill facility located in Fairless Hills, Pennsylvania, a suburb of Philadelphia. It is our intention to incorporate certain cylinders into a process currently in operation at the Fairless facility, and we have received approval from the Pennsylvania Department of Environmental Resources (PaDER) to do so without a hazardous waste permit. In addition, the PaDER has notified the EPA Region 3 Office of our plans which have been met with no opposition.

MG Industries fills cylinders with various compressed gases at its Fairless facility. Those cylinders are then transported to MG customers in accordance with federal Department of Transportation (DOT) Hazardous Materials Regulations. Our customers, in return, send cylinders containing some residual back to Fairless. At all times, the cylinders are owned by or under the equivalent control of MG. Returned cylinders are processed through a system where the residual gas is evacuated from the cylinder and scrubbed. The gaseous emission from the

Mr. Allyn Davis, cont.

May 7, 1991

scrubber is regulated pursuant to PaDER Permit Number 09-313-056 issued on May 11, 1988. Periodically, the scrubber solution is replaced and the spent solution disposed of pursuant to EPA Notice of Hazardous Waste Activity ID NO. PAD 981737794. Once processed, the cylinders are refilled with compressed gas and delivered to customers. The cylinder processing is not regulated under RCRA as the EPA has indicated it does not construe the present regulations as applying to that practice (see attached letters marked Appendix B and Appendix C).

Due to expanding business needs and the retirement of aging cylinders, MG has a continuing need to acquire additional cylinders for its inventory. Purchasing new cylinders requires significant capital outlay. MG has become aware of a number of entities, including the Los Alamos National Laboratory, which own compressed gas cylinders that are either empty or less than full. Those entities have no further use for the cylinders which are, for the most part, in good condition and could be utilized by a compressed gas manufacturer. To dispose of those cylinders would be a waste of valuable assets and would contribute to the growing waste disposal problem currently faced by the United States. Disposal is not an alternative for most of those entities anyway as there is a severe shortage of disposal facilities that can operationally, and legally, handle the residual gas prior to disposing of the cylinders.

MG proposes utilizing certain of those cylinders for its compressed gas business. Our plan is to have the contents of the cylinders analyzed. Those cylinders containing gases not typically handled in the realm of our business and those containing gases not able to be processed through our scrubber system would be eliminated from consideration. Those cylinders containing acceptable contents would be examined pursuant to Compressed Gas Association recommendations to determine their condition and ability to be put back into commercial service. MG would take title to those cylinders found to be acceptable. The cylinders would be transported back to MG's Fairless Hills facility in accordance with DOT Hazardous Materials Transportation Regulations. Once at Fairless, the cylinders would be processed as described above and then added to MG's cylinder population for use in the normal course of business. Please note that, except for the different source of the cylinders in question, we propose doing nothing different from what MG, and the entire compressed gas industry, does everyday on a routine basis.

Your response to Mr. Season, dated October 5, 1990 (a copy of which is attached for your convenience and marked Appendix D) indicates that full or partially filled cylinders containing gas

Mr. Allyn M. Davis, cont.

May 7, 1991

meeting the definition in 40 CFR Part 261 may become hazardous wastes depending on the method of discard employed by the vendor who gains these particular cylinders through Los Alamos National Lab's disposal action. MG's position is that under our plan there would be no disposal action on the part of the Lab, and , therefore, neither RCRA, nor any equivalent state law, would be applicable.

We would appreciate the opportunity to come to Dallas and discuss our process with you. Hopefully, a meeting can be arranged very soon. I will contact you shortly to discuss the arrangements.

Sincerely,



Ralph R. DeFeo
Corporate Counsel

Enclosures

RRD/rdt

2. *ES+H*
12/14/16



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202-9733

Rec'd 3/7/91

October 5, 1990

Mr. Harry T. Season, Jr.
Acting Area Manager
Department of Energy
Albuquerque Operations
Los Alamos Area Office
Los Alamos, New Mexico 87544

Dear Mr. Season:

This is in response to your inquiry of September 13, 1990, regarding the disposal of compressed gas cylinders owned by the Department of Energy, Los Alamos National Laboratory (LANL).

Your letter indicates that most of the cylinders are partially filled with compressed gaseous materials listed or exhibiting characteristic properties of a hazardous substance according to 40 CFR 261. Additionally, we understand that your compressed gas supplier (vendor) has expressed an interest in buying back these cylinders. With these issues in mind, we have provided a generalized response pending further clarification of your proposed disposition of liquid or physically solid phase of compressed gas contained in the cylinders offered up for discard.

Cylinders which contain a compacted gas residue under a pressure approaching atmospheric are considered "empty" under 40 CFR Part 261.7(b)(2), and are not subject to the Resource Conservation and Recover Act. As a matter of safety, a slight residual pressure is maintained in the cylinder prior to refilling.

Full or partially filled cylinders containing gas, liquid, or physically solid substances meeting the definitions in 40 CFR Part 261 may become hazardous wastes depending on the method of discard employed by the vendor who gains these particular cylinders through LANL's disposal action. Under such circumstance, LANL would be responsible as a generator under 40 CFR Part 262, with full responsibility for the disposition of the contents of these cylinders.

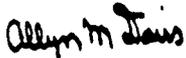
If LANL can be assured that the vendor will reuse, use, or reclaim the discarded residue (unused contents), as a recyclable material, the requirements under 40 CFR Part 261.6 would apply to the generator (LANL), transporter, and vendor (storage facility). Ultimately, LANL is responsible for any mismanagement of the material in question.

In response to your question regarding the "practice of neutralizing, scrubbing, flaring, or venting gaseous residues to the atmosphere", your attempt to draw a conclusion from the November 6, 1981, letter to Lawrence W. Bielein, Esq. from Mr. Christopher J. Capper, U.S. Environmental Protection Agency, may have led to a misunderstanding of its intent. Any disposal action taken to neutralize, scrub, flare, or vent, 40 CFR Part 261 defined gaseous residue to the atmosphere from compressed gas cylinders does not constitute an acceptable form of treatment.

It is our recommendation that you maintain coordination with the New Mexico Environmental Improvement Division regarding your disposal plans.

If you have any questions regarding this response, please have your staff contact Mr. Joseph Schultes at (FTS) 255-2192.

Sincerely yours,



Allyn M. Davis
Director
Hazardous Waste Management Division (6M)

cc: Mr. Richard Mitzelfelt, Director
Environmental Improvement Division
The Health and Environment Department





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200

DALLAS, TEXAS 75202-2733

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JUL 1 1991

LEGAL DEPARTMENT

Mr. Ralph R. DeFeo
Corporate Counsel
M G Industries
P.O. Box 849
Morrisville, PA 19067

Dear Mr. DeFeo:

Reference is made to your letter of May 7, 1991, regarding your intention to purchase existing compressed gas cylinders from Los Alamos National Laboratory (LANL) and process the hazardous residues removed from these cylinders at your Pennsylvania facility.

From your letter, we understand your position to be that the cylinders containing gas residues, purchased and transported from LANL to your Pennsylvania processing facility for reuse, would not be subject to RCRA. We concur with that position.

You suggested that a meeting be held to discuss your process. If you believe a meeting is necessary, we would be available to meet with you.

Should you have any questions, or desire to arrange a meeting, please contact Mr. Joseph Schultzes, of my staff, at (214) 655-2192.

Sincerely yours,

Allyn M Davis

Allyn M. Davis
Director
Hazardous Waste Management Division (6H)

cc: Region 3



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

NOV 3 1980

OFFICE OF WATER
AND WASTE MANAGEMENT

Lawrence W. Bierlein, Esq.
Compressed Gas Association
Suite 701
910 Seventeenth St., N.W.
Washington, D.C. 20006

Dear Mr. Bierlein:

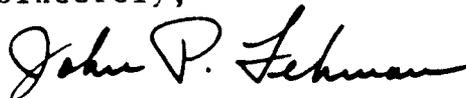
This is in response to your inquiry regarding applicability of the Resource Conservation and Recovery Act, and hazardous waste management regulations issued thereunder, to the practice in the compressed gas industry of repetitive transportation of cylinders by gas manufacturers and their customers.

As described to us during your meeting here on October 15, all cylinders are owned by or are under the equivalent control of the gas supplier. When the customer has completed his use of the gas, the cylinder is returned to the supplier. As a matter of safety, there is residual pressure in the cylinder when it is returned. (The return transportation is extensively *regulated by the Department of Transportation under the federal Hazardous Materials Regulations, 49 CFR 170-189.) The customer's purpose in making the shipment is to return the supplier's property, not to discard the remaining contents. The customer does not make the decision on the final disposition of the residue in the cylinder; this is the exclusive prerogative of the gas supplier. Further, the decision whether or not to discard the contents of the container is not made until the container is returned to the supplier.

Under these circumstances, the customer is not generating a waste by merely returning the cylinder and, neither the returned container nor the contained residue is a "solid waste" as that term is defined in the Resource Conservation and Recovery Act and Part 261 of the EPA regulations of May 19, 1980. Under §261.3(b)(1), a material must be "discarded" before it can be a solid waste. The description you have provided indicates that residual gases are not discarded until the cylinders are returned to the supplier, that no decision is made to discard

the residual gases until the cylinders are returned, and that the customer plays no part in this decision. Therefore, the material is not discarded until the cylinder reaches the supplier and a decision is made whether to discard the residual gas. Consequently, the customer's return of the supplier's cylinders that may hold some residue is not the shipment of a solid (or hazardous) waste. Simply returning such cylinders does not make the customer a generator, and the shipment need not be manifested to an EPA-permitted facility or be carried by a hazardous waste transporter.

Sincerely,

A handwritten signature in cursive script that reads "John P. Lehman".

John P. Lehman, Director
Hazardous and Industrial Waste Division
Office of Solid Waste (WH-565)

3/11/88



MAR 6 1988

RECEIVED
FILE NO.

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Lawrence W. Bierlein, Esq.
Compressed Gas Association
910 Seventeenth Street, N.W.
Washington, D.C. 20006

Dear Mr. Bierlein:

This is in response to your inquiry on the Resource Conservation and Recovery Act (RCRA) requirements to handle residues removed from compressed gas cylinders.

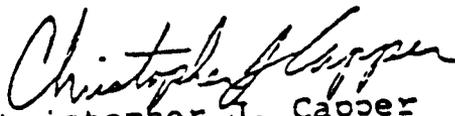
We understand that cylinders (defined generally under Department of Transportation regulations, 49 CFR 171.8, as pressure vessels having a water capacity not exceeding 1000 pounds and constructed in accordance with DOT requirements) are typically returned to gas suppliers containing gaseous residues. We further understand that these returned cylinders often are "topped off" without discard of the residues, and with reclamation of the residues by the gas supplier. In these situations, the residues are not solid wastes under §261.2, and thus, do not entail consideration of compliance with the hazardous waste regulations. (See letter from John P. Lehman to you dated November 3, 1980.)

If the gas supplier, however, decides to discard cylinders containing gaseous, liquid, or physically solid residues (i.e., non-empty containers) that meet the definitions in 40 CFR Part 261, the residues in the cylinders become hazardous wastes because they are being discarded, and these residues (and the cylinders) must be handled in compliance with the regulations. Any shipment of these contained gaseous or other wastes off-site must be in compliance with all generator and transporter requirements under 40 CFR Parts 262 and 263. Additionally, any such gas cylinders which are discarded or intended to be discarded must be managed in accordance with the requirements under 40 CFR Parts 264 to 267. Furthermore, any liquid or physically solid wastes removed from the cylinders or derived from the treatment of the contained gases, such as scrubber residues or waste neutralizing solutions, that are hazardous must be managed in accordance with the Subtitle C waste regulations.

The primary question raised by the Compressed Gas Association relates to the handling of gaseous residues removed from cylinders and neutralized, scrubbed, flared, or vented to the atmosphere, and specifically whether this activity constitutes the management of hazardous waste under the RCRA regulations. EPA does not construe the present regulations as applying to these practices. EPA has prioritized its regulatory efforts regarding hazardous wastes, and concluded that the flaring and venting of hazardous compressed gases or gases that are neutralized or scrubbed prior to their release to the environment does not demand immediate regulatory attention under the hazardous waste regulations. Accordingly, it is the position of the Agency that any gas cylinder handling facility is not subject presently to regulations promulgated under the Resource Conservation and Recovery Act, in the handling, neutralization, scrubbing, flaring or venting of gaseous residues removed from compressed gas cylinders.

The Compressed Gas Association has contended that the Agency lacks jurisdiction under RCRA to regulate the neutralization, scrubbing, flaring or venting of gases removed from cylinders, based on the definition of "solid waste" in section 1004 of RCRA and the legislative history of the statute. In light of the Agency's determination expressed in this letter, that such activities are not covered by today's RCRA regulations, we see no need to resolve the jurisdictional issue at this time. The Compressed Gas Association possesses the right to petition the Court of Appeals for review if and when the Agency asserts jurisdiction under RCRA over these activities in the future.

Sincerely yours,


Christopher J. Capper
Acting Assistant Administrator
for Solid Waste and Emergency Response



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

NOV 6 1981

Lawrence W. Bierlein, Esq.
Compressed Gas Association
910 Seventeenth Street, N.W.
Washington, D.C. 20006

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Dear Mr. Bierlein:

This is in response to your inquiry on the Resource Conservation and Recovery Act (RCRA) requirements to handle residues removed from compressed gas cylinders.

We understand that cylinders (defined generally under Department of Transportation regulations, 49 CFR 171.8, as pressure vessels having a water capacity not exceeding 1000 pounds and constructed in accordance with DOT requirements) are typically returned to gas suppliers containing gaseous residues. We further understand that these returned cylinders often are "topped off" without discard of the residues, and with reclamation of the residues by the gas supplier. In these situations, the residues are not solid wastes under §261.2, and thus, do not entail consideration of compliance with the hazardous waste regulations. (See letter from John P. Lehman to you dated November 3, 1980.)

If the gas supplier, however, decides to discard cylinders containing gaseous, liquid, or physically solid residues (i.e., non-empty containers) that meet the definitions in 40 CFR Part 261, the residues in the cylinders become hazardous wastes because they are being discarded, and these residues (and the cylinders) must be handled in compliance with the regulations. Any shipment of these contained gaseous or other wastes off-site must be in compliance with all generator and transporter requirements under 40 CFR Parts 262 and 263. Additionally, any such gas cylinders which are discarded or intended to be discarded must be managed in accordance with the requirements under 40 CFR Parts 264 to 267. Furthermore, any liquid or physically solid wastes removed from the cylinders or derived from the treatment of the contained gases, such as scrubber residues or waste neutralizing solutions, that are hazardous must be managed in accordance with the Subtitle C waste regulations.

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The Compressed Gas Association has contended that the Agency lacks jurisdiction under RCRA to regulate the neutralization, scrubbing, flaring or venting of gases removed from cylinders, based on the definition of "solid waste" in section 1004 of RCRA and the legislative history of the statute. In light of the Agency's determination expressed in this letter, that such activities are not covered by today's RCRA regulations, we see no need to resolve the jurisdictional issue at this time. The Compressed Gas Association possesses the right to petition the Court of Appeals for review if and when the Agency asserts jurisdiction under RCRA over these activities in the future.

Sincerely yours,



Christopher J. Capper
Acting Assistant Administrator
for Solid Waste and Emergency Response



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

NOV 3 1980

OFFICE OF WATER
RECEP. WASTE MANAGEMENT

NOV 6 1980

LAW DEPARTMENT

Lawrence W. Bierlein, Esq.
Compressed Gas Association
Suite 701
910 Seventeenth St., N.W.
Washington, D.C. 20006

Dear Mr. Bierlein:

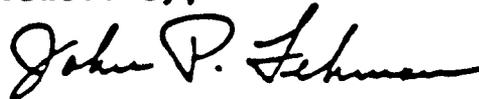
This is in response to your inquiry regarding applicability of the Resource Conservation and Recovery Act, and hazardous waste management regulations issued thereunder, to the practice in the compressed gas industry of repetitive transportation of cylinders by gas manufacturers and their customers.

As described to us during your meeting here on October 15, all cylinders are owned by or are under the equivalent control of the gas supplier. When the customer has completed his use of the gas, the cylinder is returned to the supplier. As a matter of safety, there is residual pressure in the cylinder when it is returned. (The return transportation is extensively regulated by the Department of Transportation under the federal Hazardous Materials Regulations, 49 CFR 170-189.) The customer's purpose in making the shipment is to return the supplier's property, not to discard the remaining contents. The customer does not make the decision on the final disposition of the residue in the cylinder; this is the exclusive prerogative of the gas supplier. Further, the decision whether or not to discard the contents of the container is not made until the container is returned to the supplier.

Under these circumstances; the customer is not generating a waste by merely returning the cylinder and, neither the returned container nor the contained residue is a "solid waste" as that term is defined in the Resource Conservation and Recovery Act and Part 261 of the EPA regulations of May 19, 1980. Under §261.3(b)(1), a material must be "discarded" before it can be a solid waste. The description you have provided indicates that residual gases are not discarded until the cylinders are returned to the supplier, that no decision is made to discard

the residual gases until the cylinders are returned, and that the customer plays no part in this decision. Therefore, the material is not discarded until the cylinder reaches the supplier and a decision is made whether to discard the residual gas. Consequently, the customer's return of the supplier's cylinders that may hold some residue is not the shipment of a solid (or hazardous) waste. Simply returning such cylinders does not make the customer a generator, and the shipment need not be manifested to an EPA-permitted facility or be carried by a hazardous waste transporter.

Sincerely,

A handwritten signature in black ink, reading "John P. Lehman". The signature is written in a cursive style with a prominent initial "J".

John P. Lehman, Director
Hazardous and Industrial Waste Division
Office of Solid Waste (WH-565)

B. Ignitable Liquid Residues in Containers

One commenter was concerned with the one-inch rule as applied to residues in empty containers that are hazardous solely because they are ignitable liquids. The commenter argued that the fluidity coupled with the flash point of liquid ignitable residues should be of more important regulatory concern to EPA than the quantity of liquid ignitable residue remaining in an empty container.

Specifically, the commenter pointed out that many liquid ignitable wastes have low fluidity and therefore do not drain well, and that more than one inch of such materials may remain in a container despite efforts to drain the container. The commenter believed that the residues in such regulated containers are actually of low concern in landfills because they are not mobile liquids. EPA disagrees with the commenter. EPA is concerned with such wastes because they pose a fire hazard (unless the containers are handled in such a way as to prevent ignition), and not necessarily because they may leach into groundwater, especially if these wastes are not also toxic. In fact, containers holding greater than one inch of extremely viscous ignitable material may pose a greater hazard than the amount of a very fluid ignitable material because the waste will not tend to run out of the container and mix with other wastes and be diluted.

The same commenter stated that the specific flash point of a material within the "broad" EPA ignitability definition (flashpoint $< 140^{\circ}\text{F}$) may be a more important factor than the one-inch residue limitation in defining whether the residue in a container is hazardous and ought to be subject to regulation. The commenter believed that the flash point characteristic as well as the flash point is important in determining the hazard posed by an ignitable liquid waste to human health and the environment, and that, for example, container residues (irrespective of quantity) which flash below 140°F but do not support combustion, are less hazardous and should not be treated as hazardous wastes.

In this comment letter, the writer was not so much questioning the one-inch rule as he was questioning EPA's definition of ignitable liquid. EPA previously explained its rationale for setting a flash point limit of 140°F in defining an ignitable liquid. (See 45 FR 33108-33109, May 19, 1980, and Background Document: § 261.21—Characteristic of Ignitability," May 2, 1980, p. 25.) EPA has previously

recognized that wastes classified by one hazardous waste characteristic may pose various degrees of hazard based on other properties of the waste; for example, EPA has recognized that certain materials that flash will not support combustion, and thus EPA excluded aqueous solutions which contain less than 24 percent alcohol by volume from the definition of ignitable liquid.

The Agency has received other comments on degree of hazard issues and is continuing to resolve them. Recently, the Agency has received a petition from National Paint and Coatings Association (NPCA) on the same issue of ignitable liquids discussed above. As a result, the Agency is considering amending the definition of ignitable liquid and will consider the concerns of the commenter when addressing NPCA's petition. The Agency is therefore not changing the definition of the one-inch rule for ignitable liquids at this time.

C. Gas Residues

In § 261.7(b)(2), EPA defines an empty compressed gas container as one in which the pressure approaches atmospheric. Several commenters expressed concern that users of gas cylinders might try to use extraordinary means to reach atmospheric pressure before returning gas cylinders to the gas suppliers who own them.

The commenters suggested substituting the words "... reaches the pressure of the users' internal distribution manifold" for "approaches atmospheric." EPA does not agree with this comment because this change could result in a significant amount of material remaining in the cylinder. EPA defined an empty gas cylinder as one in which the pressure approaches atmospheric, because the Agency is concerned with the hazards posed by the residual gas, which if improperly managed, may pose a substantial hazard to human health and the environment. EPA believes, however, that this comment largely resulted from confusion over when a compressed gas cylinder becomes subject to RCRA control.

On November 3, 1980, in a letter to Lawrence W. Bierlein of the Compressed Gas Association, John P. Lehman of EPA clarified the applicability of the RCRA hazardous waste regulations to users of compressed gas. The letter stated that the return of the used cylinder to the supplier was not generation of waste under RCRA. This letter was widely distributed to users of compressed gas cylinders and, at the request of many compressed gas users, an edited version

of the information contained in the letter is printed below for the reader's convenience. (The Compressed Gas Association provided the information on the use and disposal of compressed gas cylinders to EPA.)

All compressed gas cylinders are owned by or are under equivalent control of the gas supplier. When the customer has completed his use of the gas, the cylinder is returned to the supplier. As a matter of safety, there is residual pressure in the cylinder when it is returned. (The return transportation is extensively regulated under the Federal Hazardous Materials Regulation, 49 CFR 170-189). The customer's purpose in making the shipment is to return the supplier's property, not to discard the remaining contents of the cylinder. The general practice is to return cylinders for refilling. The customer does not make the decision on the final disposition of the residue in the cylinder; this is the exclusive prerogative of the gas supplier. Further, the decision whether or not to discard the contents of the container is not made until the container is returned to the supplier.

Under these circumstances, the customer is not generating a waste by merely returning the cylinder and neither the returned container nor the contained residue is a "solid waste" as that term is defined by the Resource Conservation and Recovery Act and 40 CFR Part 260. Because the residue gases are not discarded by the customer and the used compressed gas cylinder is returned to the supplier, the decision that renders the cylinder (and contained gas) to be a waste is made by the supplier. The customer's return of the supplier's cylinder that may hold some residue does not constitute the shipment of a solid (or hazardous) waste. The cited DOT requirements apply, however, and the containers may have to be transported as a hazardous material.

D. Regulation of Residues of Wastes Listed in § 261.33(e)

Under § 261.7 and § 261.33(c), residues in containers which held acutely hazardous wastes are not excluded from regulation unless the container which had previously held a waste listed in § 261.33(e) is triple rinsed or cleaned by an equivalent method. One commenter took issue with this provision, stating that the amounts of acutely hazardous wastes remaining in containers which are emptied according to § 261.7(b)(1) are *de minimis* and pose no significant threat to human health and the environment. The commenter further stated that the resulting rinsate would require increased handling and exposure of the waste to humans, and that such small amounts of residue do not justify this increased handling and exposure.

EPA disagrees with the commenter that quantities of acutely hazardous waste remaining in a container which has been emptied according to § 261.7(b)

LABORATORY-WIDE REMOVAL OF COMPRESSED GAS CYLINDERS

PROBLEM:

Presently more 1500 unwanted compressed gas cylinders throughout the Laboratory require some form of enhanced management. Many cylinders have inoperable valves, questionable integrity, unknown contents, or possible radioactive contamination. The current inventory also shows that cylinders can contain the most toxic of manmade organic and inorganic chemicals. The current storage of the majority of these cylinders do not conform with RCRA or OSHA.

To provide enhanced management of these cylinders, the Waste Management Group, HSE-7, will remove the cylinders and determine their contents. HSE-7 will then ensure that the cylinders are recontainerized into DOT-approved containers and/or shipped off-site for ultimate disposal through incineration.

HSE-7 anticipates that this effort will take approximately 8 to 12 months and cost around \$1.5 M. Ongoing Laboratory operations could be interrupted.

The DOE has not approved the required NEPA documentation for this new program, which is scheduled to begin July 16, 1990. Approval could take more than a year. Safe siting of the gas cylinder project is critical because of the possibility of a maximum credible release from an accident.

SOLUTION:

Through the assistance of a highly qualified subcontractor, the Laboratory must begin the timely management of these highly dangerous compressed gas cylinders as soon as possible. The subcontractor has extensive experience in managing unknown and unstable cylinders at federal and commercial facilities, at Superfund sites, and in several states. The subcontractor provides the maximum level of expertise in radiation protection and analyses, gas cylinder recontainerization and sampling, and treatment by incineration at a approved Laboratory-inspected facility. Inform DOE of the action we are taking to eliminate the problem.

RECOMMENDATIONS/ACTIONS:

The Laboratory's effort in managing compressed gas cylinders must begin on July 16, 1990. For maximum protection of the environment, Laboratory personnel, and the public, this effort must be sited at TA-54, Area G.

With extensive coordination by HSE-7 with the division's Waste Coordinators, Sector Leaders, ENG Area Coordinators, and Pan Am, we will rid the Laboratory of this existing dangerous situation. Also, a meeting will be scheduled to inform DOE of our actions.

APPENDIX A



Department of Energy
Albuquerque Operations
Los Alamos Area Office
Los Alamos, New Mexico 87544

SEP. 13 1990

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

P 473 752 664

Mr. Allyn Davis, Director
U. S. Environmental Protection Agency
Hazardous Waste Division
1445 Ross Avenue, Suite 1200
Dallas, TX 75201

Dear Mr. Davis:

The Department of Energy (DOE) has become aware that the Los Alamos National Laboratory (LANL) is having some difficulty determining how to manage compressed gas cylinders that are owned by DOE. As a money-saving effort, the decision was made several years ago to purchase cylinders, rather than lease them. The cylinders were refilled either on-site, at a government owned/contractor operated facility, or off-site by a gas supplier.

A large number of these cylinders are no longer needed by LANL. Most are partially filled. Some contain material that is listed as a hazardous waste or exhibits a characteristic of a hazardous waste according to 40 CFR 261. Vendors have expressed an interest in buying back these cylinders to return them to their inventory.

The Environmental Protection Agency (EPA) has addressed this issue in three different documents, copies of which are enclosed. The main difference is the issue of gas cylinder ownership. In all the documents, EPA's position is based on the premise that a supplier (i.e., vendor) owns the cylinder and the user returns the cylinder for refilling. It is obvious from the November 6, 1981 letter to Lawrence W. Bierlein, Esq. from Christopher J. Capper that discarded cylinders that contain a hazardous constituent (i.e., containers that are not "empty" according to 40 CFR 261.7(b)) must be handled as a hazardous waste. Based on the 1982 Federal Register notice (47 FR 36094), are the cylinders owned by a facility such as ours and returned/sold to a compressed gas vendor considered to be discarded? In other words, can we return cylinders to a vendor who does not have a hazardous waste permit?

RETURN RECEIPT REQUESTED

Mr. Allyn Davis

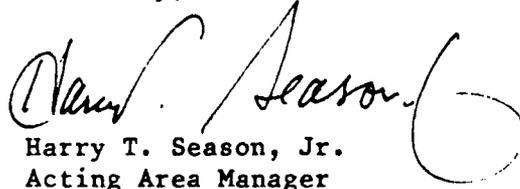
2

The 1981 letter also states that EPA does not consider the practice of neutralizing, scrubbing, flaring or venting gaseous residues to the atmosphere to be covered by the then-current hazardous waste regulations. Does this interpretation apply to such operations conducted at facilities such as ours, and are there any more recent guidelines on this issue?

Your timely response will be greatly appreciated, because we have a large number of cylinders that can be returned to useful service instead of being disposed/treated as a Resource Conservation and Recovery Act (RCRA) waste (solid or hazardous). Presently, we are handling several of them (i.e., storing) as hazardous waste, which causes storage problems at LANL, both from the standpoint of permit requirements and physical space.

If you have any questions regarding this request, please contact Dr. Paul Schumann of my staff at FTS 855-5027.

Sincerely,

A handwritten signature in cursive script that reads "Harry T. Season, Jr." followed by a large, stylized flourish.

Harry T. Season, Jr.
Acting Area Manager

1PS-001

Enclosures

cc w/enclosures:

Dr. Kirkland L. Jones, Deputy Director, Environmental Improvement
Division, Santa Fe, NM
J. Themelis, EHD, AL
A. Tiedman, ADO, LANL, MS-A120

RECORD OF COMMUNICATION

SUBJECT: Control 6H-744-92

FROM: Randy Brown (6H-C)
Chief, RCRA Enforcement

TO: Jack Divita (6H)
Deputy Division Director
Hazardous Waste Management Division

DATE: 11/3/92

RECEIVED

NOV 03 1992

RCRA ENFORCEMENT
TEXAS SECTION

SUMMARY OF COMMUNICATION

I would like to request an extension of one (1) week to complete the above referenced control. This would allow the Texas Section to coordinate their response with the ALONM Section's response to a control on the same subject from M. G. Industries, and would allow sufficient time to obtain HQ's input. If you have any questions, please contact me at x6794. Thank you.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

OK

~~11/10/92~~

11/12/92

INFORMATION COPIES TO: Laws, Gloria

SPECIAL

U.S. ENVIRONMENTAL PROTECTION
AGENCY

EPA FORM 1320-8 (4-73)