

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York, 14203-2999



Thomas C. Jorling
Commissioner

December 15, 1993

Ms. Jill Knickerbocker
Environmental Manager
CWM Chemical Services, Inc.
1550 Balmer Road
Model City, New York 14107

FILE COPY

Dear Ms. Knickerbocker:

F020-F023 and F026-F027
Management Plan

The Department has reviewed your letter dated October 18, 1993, regarding management of dioxin bearing incineration residues using stabilization and land disposal method. The referenced management plan outlined by your letter is hereby approved by the Department.

If you have any questions, please call.

Sincerely,

Bidjan Rostami, P.E.
Environmental Engineer II

BR:sz

cc: Mr. Frank Shattuck/Mr. Louis Violanti
Mr. Edward Hess
Mr. Paul Counterman
Mr. James Devald

Dioxin Mgt Plan

file along w/copy
of plan submitted
10/18/93

copies: J. Hagaman ✓
D. Leonard ✓
E. Waldynski
H. Dunaway 01-03-94
C



PRINTED ON RECYCLED PAPER

ref: Hwy Waste Mgmt



CWM Chemical Services, Inc.

Model City Facility
P.O. Box 200
1550 Balmer Road
Model City, New York 14107
716/754-8231

October 18, 1993

Mr. L. Violanti
NYS Department of Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, NY 14203-2999

FILE COPY

Re: Management of F020-F023 and F026-F027 Incineration Residues

Dear Mr. Violanti:

New York State regulation 6NYCRR 373-2.1¹⁴₃(^m)(k), Special requirements for hazardous wastes F020, F021, F022, F023, F026 and F027, specifies that these wastes may not be placed in a land treatment unit unless a management plan for these wastes has been submitted and approved by the Department. CWM wishes to accept incinerator residues bearing these codes. As the waste has already been treated and would meet the LDR standards for the dioxins and furans upon receipt at Model City, the potential for environmental exposure would be minimal. As such, this letter is being submitted to address each of the factors to be considered according to the regulation and request approval for the management plan specified herein.

- (i) the volume and the physical and chemical characteristics of the wastes, including their potential to migrate through soil or to volatile or escape into the atmosphere;

As the material to be received would be incineration residues such as ash, it would already have been thermally treated to meet the dioxins and furans standards. Very low, if any detectable, concentrations of these constituents would be present, minimizing the potential for migration, volatilization or escape. As the material will be stabilized for metals treatment, the potentially dusty material will be unloaded in the stabilization pit under air handling control. The stabilization will not only treat the material to the metals standards, but further reduce the potential for leaching and mobilization of the constituents by reducing the surface area and "locking" them in a cured concrete matrix. The volume to be treated is to be determined.

- (ii) the attenuate properties of underlying and surrounding



soils or other materials.

As the material will meet the LDR standards upon disposal in the land disposal unit, there is little potential for mobilization of the constituents of concern. In any event, SLF 12 is a double synthetic lined landfill with three feet of compacted clay below the synthetic liners. Clay has very good adsorptive properties for compounds such as PCBs. Due to their structural similarities, it is expected that dioxins and furans would be adsorbed in a similar fashion.

- (iii) the mobilizing properties of other materials co-disposed with these wastes; and

As the material will meet the LDR standards upon disposal in the land disposal unit, there is little potential for mobilization of the constituents of concern. Dioxins and furans are organics and therefore would be soluble in other organic materials such as solvents. Most of the hazardous wastes being landfilled have an effective LDR standard for organic constituents in the ppm range. Other wastes are restricted by the SLF 12 permit which sets a limit of 2% organic priority pollutants and spent solvent compounds. Therefore, the amount of "solvent type" materials present that could mobilize dioxins and furans if they were present is controlled.

- (iv) the effectiveness of additional treatment, design or monitoring techniques.

As described for (i), the incinerator residues will be treated in the stabilization facility which will further reduce the leachability of any constituents present. The dioxans and furans are listed constituents of F039 multi-source leachate, and these compounds are included in the list of parameters analyzed on the site's leachate on a bi-annual basis. Therefore, monitoring for the presence of these compounds in leachate is already covered under a separate regulatory requirement.

Based on the information provided above, CWM believes that it's current practices for stabilization and land disposal constitute an environmentally protective method of handling dioxin bearing incineration residues. CWM is requesting approval of the management plan outlined above.

If you have any questions concerning this matter, please contact me at 716/754-0246.

Sincerely,
CWM CHEMICAL SERVICES, INC.

Jill A. Knickerbocker

Jill A. Knickerbocker
Environmental Manager
Model City Facility

cc: P. Counterman -NYSDEC/Albany, NY
T. Corbett -NYSDEC/Buffalo, NY
A. Everett -USEPA/New York, NY
J. Devald -NCHD/Niagara Falls, NY
E. Hess -NYSDEC/On-Site Monitor
J. Stanulonis -CWM/Model City, NY
R. Gurske -CWM/Houston, TX

EMD subject file ✓
Q&A 6



"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Jill Knickerbocker
Jill Knickerbocker
Environmental Manager
Model City Facility

10/18/93
Date

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999
(716) 851-7220



Michael D. Zay
Commissioner

March 5, 1996

MAR - 7

Ms. Jill Knickerbocker
Regulatory and Compliance Manager
CWM Chemical Services, Inc.
1550 Balmer Road
Model City, New York 14107

Dear Ms. Knickerbocker:

**Management of F020-F023 and F026-F027
Incineration Residues and Contaminated
Media**

The Department has reviewed the management plan for the above-referenced wastes submitted with your letter dated February 2, 1996. The referenced plan is hereby approved by the Department.

If you have any questions, please call me at (716)851-7220.

Sincerely,

Bidjan Rostami, P.E.
Environmental Engineer II

BR:sz

cc: **Mr. Frank Shattuck/Mr. James Strickland - NYSDEC, Buffalo**
Ms. Carol Jones, CWM On-Site Monitor
Mr. Edwin Dassatti - NYSDEC, Albany
Mr. James Devald - NCHD



Waste Management, Inc.

CWM Chemical Services, Inc.
1550 Balmer Rd.
P.O. Box 200
Model City, N.Y. 14107

Phone 716/754-8231

February 2, 1996

Mr. Frank Shattuck
NYS Department of Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, NY 14203-2999

**Re: Management of F020-F023 and F026-F027 Incineration Residues
and Contaminated Media**

Dear Mr. Shattuck:

New York State regulation 6NYCRR 373-2.13^{14 m}(X), Special requirements for hazardous wastes F020, F021, F022, F023, F026 and F027, specifies that these wastes may not be placed in a land treatment unit unless a management plan for these wastes has been submitted and approved by the Department. CWM wishes to accept incinerator residues and contaminated environmental media that bears these codes and meets the organic LDR standards (metals may require treatment). Because the waste would meet the LDR standards for the dioxins and furans upon receipt at Model City, the potential for environmental exposure would be minimal. This letter is being submitted to address each of the factors that must be considered according to the regulation and request approval for the management plan specified herein.

- (i) the volume and the physical and chemical characteristics of the wastes, including their potential to migrate through soil or to volatile or escape into the atmosphere;

Incineration residues such as ash, would already have been thermally treated to meet the dioxins and furans standards. Very low, if any detectable, concentrations of these constituents would be present, minimizing the potential for migration, volatilization or escape. As the material is likely to be stabilized for metals treatment, the potentially dusty material will be unloaded in the stabilization pit under air handling control. The stabilization will not only treat the material to the metals standards, but further reduce the potential for leaching and mobilization of the constituents by reducing the surface area and "locking" them in a cured concrete matrix. The volume to be treated is to be determined.

Similary, environmental media, such as soil, that naturally meets the LDR standards would contain very low concentrations of dioxins and furans.

- (ii) the attenuate properties of underlying and surrounding soils or other materials.

As the material will meet the LDR standards upon disposal in the land disposal unit, there is little potential for mobilization of the constituents of concern. In any event, RMU-1 is a double synthetic lined landfill with three feet of compacted clay below the synthetic liners. Clay has very good adsorptive properties for compounds such as PCBs. Due to their structural similarities, it is expected that dioxins and furans would be adsorbed in a similar fashion.

- (iii) the mobilizing properties of other materials co-disposed with these wastes; and

As the material will meet the LDR standards upon disposal in the land disposal unit, there is little potential for mobilization of the constituents of concern. Dioxins and furans are organics and therefore would be soluble in other organic materials, such as solvents. Most of the hazardous wastes being landfilled are regulated by the LDR standards, which restrict the organic constituents to the ppm range. Other wastes are restricted by the RMU-1 permit which sets a limit of 2% organic priority pollutants and spent solvent compounds. Therefore, the amount of "solvent type" materials present that could mobilize dioxins and furans is minimal.

- (iv) the effectiveness of additional treatment, design or monitoring techniques.

As described for (i), the incinerator residues will be treated in the stabilization facility which will further reduce the leachability of any constituents present. The media (soil) is expected to be able to be landfilled without additional treatment. Dioxans and furans are listed constituents of F039 multi-source leachate, and these compounds are included in the list of parameters analyzed on the site's leachate on a bi-annual basis. Therefore, monitoring for the presence of these compounds in the landfill leachate is already covered under a separate regulatory requirement.

Based on the information provided above, CWM believes that it's current practices for stabilization and land disposal constitute an environmentally protective method of handling trace dioxin bearing wastes. CWM is requesting approval of the management plan outlined above.

If you have any questions concerning this matter, please contact me at 716/754-0246.

Sincerely,
CWM CHEMICAL SERVICES, INC.

Jill A. Knickerbocker

Jill A. Knickerbocker
Regulatory and Compliance Manager
Model City Facility

cc: E. Dassati -NYSDEC/Albany, NY
B. Rostami -NYSDEC/Buffalo, NY
T. Corbett -NYSDEC/Buffalo, NY
A. Everett -USEPA/New York, NY
J. Devald -NCHD/Niagara Falls, NY
C. Jones -NYSDEC/On-Site Monitor
M. McInerney -CWM/Model City, NY
A. Kitto -CWM/Model City, NY
S. Heindl -CWM/Model City, NY
P. Spooner -WMI/Wakefield, MA
EMD subject file
Q&A



Waste Management, Inc.

CWM Chemical Services, Inc.
1550 Balmer Rd.
P.O. Box 200
Model City, N.Y. 14107

Phone 716/754-8231

August 29, 1996

Bidjan Rostami
NYS Department of Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, NY 14203-2999

Re: Correction of F020-F023 and F026-F027 Management Plan

Dear Mr. Rostami:

Please be advised that CWM Chemical Services, Inc.'s (CWM's) dioxin management plan for incineration residues and contaminated media, submitted to the Department on February 2, 1996 and approved by yourself on March 5, 1996, included an incorrect regulatory reference. The plan referenced 6 NYCRR 373-2.13(k) applicable to land treatment units, rather than 373-2.14(m), which is applicable to landfills. The requirements under both sections are the same, hence the information in the plan is correct as submitted. Please consider the February 2 plan revised by the submission of this letter.

If you have any questions about this correction, please contact me at 716/754-0246.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Sincerely,
CWM CHEMICAL SERVICES, INC.

Jill A. Knickerbocker
Regulatory and Compliance Manager
Model City Facility

cc: E. Dassati	-NYSDEC/Albany, NY
J. Reidy	-USEPA/New York, NY
J. Devald	-NCHD/Niagara Falls, NY
C. Jones	-NYSDEC/On-Site Monitor
M. McInerney	-CWM/Model City, NY

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999
(716) 851-7220



Michael D. Zapp
Commissioner

March 5, 1996

WAR - 7

Ms. Jill Knickerbocker
Regulatory and Compliance Manager
CWM Chemical Services, Inc.
1550 Balmer Road
Model City, New York 14107

Dear Ms. Knickerbocker:

**Management of F020-F023 and F026-F027
Incineration Residues and Contaminated
Media**

The Department has reviewed the management plan for the above-referenced wastes submitted with your letter dated February 2, 1996. The referenced plan is hereby approved by the Department.

If you have any questions, please call me at (716)851-7220.

Sincerely,

Bidjan Rostami, P.E.
Environmental Engineer II

BR:sz

cc: **Mr. Frank Shattuck/Mr. James Strickland - NYSDEC, Buffalo**
Ms. Carol Jones, CWM On-Site Monitor
Mr. Edwin Dassatti - NYSDEC, Albany
Mr. James Devald - NCHD



WASTE MANAGEMENT, INC.

CWM Chemical Services, L.L.C.
1550 Balmer Rd.
P.O. Box 200
Model City, N.Y. 14107
716/754-8231

May 25, 1999

Frank Shattuck, P.E.
New York State Department of Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Re: Update of Dioxin Management Plan

Dear Mr. Shattuck:

New York State regulation 6 NYCRR 373-2.14(m) requires that a landfill have an approved management plan prior to the disposal of waste bearing the codes F020-F023 and F026-F027. CWM Chemical Service, L.L.C.'s previously approved plan described the management of incinerator residues and environmental media with these EPA codes. CWM is submitting an update to their dioxin management plan to address debris, such as metal, concrete and wood, bearing these codes.

- (i) the volume and the physical and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

Debris bearing these codes would be macroencapsulated in CWM's stabilization facility. When the waste is placed in the landfill, it will be in a sealed HDPE vault. Macroencapsulation minimizes the potential for migration or volatilization. The volume to be treated will be determined by customer demand.

- (ii) the attenuate properties of the underlying soils;

Previously addressed.

- (iii) the mobilizing properties of other materials co-disposed with these wastes;

As previously described, the amount of organics allowed in the landfill is restricted by the Land Disposal Restrictions (LDR) regulations. In addition, the debris with potential trace dioxins would be sealed in a macro vault and thus further protected from potential leaching.

- (iv) the effectiveness of additional treatment, design or monitoring techniques.

Macroencapsulation minimizes the potential for migration or volatilization for the trace levels of dioxins and furans that are expected to be present on contaminated debris from remediation.

CWM believes that it's current practices for macroencapsulation and land disposal constitute and environmentally protective method of handling debris with trace dioxin contamination.

If you have any questions concerning this update, please contact me at 716/754-0246.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Sincerely,
CWM CHEMICAL SERVICES, L.L.C.

Jill A. Knickerbocker

Jill A. Knickerbocker
Technical Manager
Model City Facility

cc:	P. Merges	-	NYSDEC/Albany, NY
	J. Reidy	-	USEPA/New York, NY
	J. Devald	-	NCHD/Niagara Falls, NY
	C. Jones	-	NYSDEC/On-Site Monitor
	D. Maruca	-	CWM/Model City, NY
	A. Davis	-	CWM/Model City, NY
	R. Zayatz	-	CWM/Model City, NY
	A. Oswald	-	CWM/Model City, NY
	EMD Subject File		

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