CONTAINS CONFIDENTIAL INFORMATION-SUBJECT TO PROTECTIVE ORDER

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

BEFORE THE ADMINISTRATOR

In the Matter of:	)	
	)	
Carbon Injection Systems LLC,	)	
Scott Forster,	)	**Docket No. RCRA-05-2011-0009**
and Eric Lofquist,	)	
	)	
	)	
Respondents.	)	
	)	

COMPLAINANT'S RESPONSE TO
RESPONDENTS MOTION FOR ACCELERATED DECISION

CONTAINS CONFIDENTIAL INFORMATION-SUBJECT TO PROTECTIVE ORDER

TABLE OF CONTENTS

CONTAINS CONFIDENTIAL INFORMATION-SUBJECT TO PROTECTIVE ORDER

TABLE OF AUTHORITIES

CONTAINS CONFIDENTIAL INFORMATION-SUBJECT TO PROTECTIVE ORDER

CONTAINS CONFIDENTIAL INFORMATION-SUBJECT TO PROTECTIVE ORDER

I. Introduction

Complainant, pursuant to 40 C.F.R. § 22.16(b) of the *Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits* ("Consolidated Rules" or "Rules"), offers this Response to Respondents' Motion for Accelerated Decision ("Respondents' Motion") and respectfully requests that the Presiding Officer deny the Respondents' Motion for Accelerated Decision. Pursuant to 40 C.F.R. § 22.20(a), the Presiding Officer may render an accelerated decision in favor or Respondents only "if no genuine issue of material fact exists and [Respondents are] entitled to judgment as a matter of law." The Respondents have failed to make this showing and therefore an accelerated decision in favor of Respondents cannot be rendered. Instead, the record, as explained in Complainant's Motion for Partial Accelerated Decision and in this Response, supports accelerated decision in Complainant's favor.

Respondents' Motion is an amalgam of misstated "facts," misstatements of law, and applications of misstatements of fact (or highly selective and thus misleading facts) to law. As discussed in detail below, there is no genuine issue of material fact that: Respondents stored and treated hazardous waste without a RCRA permit when they stored and treated (by blending with used oil) K022 hazardous waste (which Respondents do not seem to dispute) and D001, D035, F003, F005 hazardous wastes [redacted]); Unitene LE and Unitene AGR are solid wastes and hazardous wastes, because they are "by-products" of a production process; alternatively, if Unitene LE and Unitene AGR are deemed "products" or "co-products", then Unitene LE and Unitene AGR are still subject to RCRA regulation because they are commercial

chemical products burned for energy recovery and they are not themselves fuel; the Unitene LE and Unitene AGR are neither recycled materials "[u]sed or reused as ingredients in an industrial process to make a product. . ." nor "[u]sed or reused as effective substitutes for commercial products" (40 C.F.R. § 261.2(e)(1) and OAC § 3745-51-02(E)(1)), because they were "burned for energy recovery, used to produce a fuel, or contained in fuels" (40 C.F.R. § 261.2(e)(2) and OAC § 3745-51-02(E)(2)) after the hazardous waste blend containing the Unitenes was sold to WCI and burned in WCI's blast furnace for energy recovery. There also is no genuine issue of material fact that Respondents Scott Forster and Eric Lofquist are directly liable as operators, because both Forster and Lofquist exercised active and pervasive control over facility operations, and are therefore liable as operators under RCRA. Finally, there is no genuine issue of material fact that recapture of both the economic benefit of the delayed/avoided cost of having and maintain a hazardous waste storage and treatment permit as calculated using U.S. EPA's BEN model, and the economic benefit of the profit earned by Respondents' sale of an illegal product to a business that did not have a permit to receive and burn that product, is consistent with law, cases interpreting the law, and U.S. EPA policy and guidance, and award of multi-day penalties as calculated by EPA is appropriate in this matter, based on Respondents' storage and treatment of both K022 hazardous wastes and the hazardous wastes renamed Unitene LE and Unitene AGR.

II. Legal Arguments Raised In Respondents' "Introduction" and "Statement of Undisputed Material Facts" Are Incorrect

A large portion of Respondents' Motion is devoted to an "Introduction" and a "Statement of Undisputed Material Facts." These sections contain numerous misstatements. In the "Introduction", Respondents imply that Complainant did not

include sufficient allegations in its Complaint and did not include exhibit references in its prehearing exchange documents to support the specific claim that Respondents Scott Forster and Eric Lofquist are liable under RCRA as "owners and operators". Respondents' Motion at 3. However, under 40 C.F.R. § 22.14(a)(3), a complaint is only required to contain a "concise statement of the factual basis for each violation alleged." The Complaint in this matter does so by stating that Respondents Scott Forster and Eric Lofquist were "owners" or "operators" during the relevant time period. CX40 at EPA17072-73. In addition, neither 40 C.F.R. § 22.19(2) nor the August 5, 2011 Order of this Court, outlining the requirements for the prehearing exchange in this matter require exhibit references in prehearing exchange documents to support specific claims.

Respondents' Motion implies in its "Introduction" that EPA did not file its case in a timely fashion. Respondents' Motion at 3. However, Respondents signed a series of Tolling Agreements and Respondents have not challenged the complaint on statute of limitations grounds. CX32-34.

Section A of the "Statement of Undisputed Material Facts" in Respondent's Motion also indicates that [redacted] CX24. As explained in Section V. below, fuel oil is burned in a blast furnace in order to recover energy. Section A of Respondents' Motion also states that Respondents Forster and Lofquist did not participate in "day-to-day management" of the CIS Facility because they were rarely physically present at the CIS Facility. As explained in Section VII., below, physical

presence at the Facility was not necessary to actively manage the facility – particularly management of the activity which constituted the violations described in the Complaint.

Sections C and D of the "Statement of Undisputed Material Facts" in Respondent's Motion purport to address: (1) the relationship between CIS and the Forster/Lofquist entity called General Environmental Management LLC ("GEM") and (2) an alleged "2005-2006 Investigation of the Purchase of Exempted Hazardous Waste [by GEM]." Respondents' Motion at 8 and 11. However, the description of the relationship between CIS and GEM is not consistent with the documents in this case and the alleged investigation for GEM was in fact an investigation by Forster and Lofquist for CIS, as explained in Section VII., below.

Section E of the "Statement of Undisputed Material Facts" in Respondent's Motion discuss facts relevant to Unitene LE and Unitene AGR, and are addressed herein at Section IV., below.

III. Respondents Incorrectly State the Standard for Accelerated Decision

Respondents fail to correctly state the standard for accelerated decision in their Motion. Respondent's Motion at 26. As explained in Section V. of Complainant's Motion for Accelerated Decision as to Liability ("Complainant's Motion"), the Consolidated Rules state the standard for accelerated decision: accelerated decision is appropriate when there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law. 40 C.F.R. § 22.20(a). While administrative tribunals have looked to Federal Rule of Civil Procedure 56 when interpreting Section 22.20, Rule 56 does not control. *See* Fed. R. Civ. P. 56; *In re: Consumers Scrap Recycling, Inc.*, CAA Appeal No. 02-06, CWA Appeal No. 02-06, RCRA (3008) Appeal

No. 02-03, MM Appeal No. 02-01, 2004 EPA App. LEXIS 1 at *39-41 (Jan. 29, 2004); *In Re: U.S. Army, Fort Wainwright Central Heating and Power Plant*, CAA Appeal No. 02-04, 2003 EPA App. LEXIS 6 at *19, n. 11 (June 5, 2003); *In re: Rogers Corporation*, TSCA Appeal No. 98-1, 2000 EPA App. LEXIS 28 at *39-43 (Nov. 28, 2000); *In re BWX Techs., Inc.*, RCRA Appeal No. 97-5, 2000 EPA App. LEXIS 9 at *34-41 (Apr. 5, 2000); *In the Matter of: Elementis Chromium, Inc.*, Docket No. TSCA-HQ-210-5022, 2011 EPA ALJ LEXIS 18 at *25-28 (August 8, 2011); *In the Matter of: Mercury Vapor Processing Technologies, Inc., et al.*, Docket No. RCRA-05-2010-0015, 2011 EPA ALJ LEXIS 15 at *10-14 (July 14, 2011).

Furthermore, as explained in Section IV. of Complainant's Motion, where the movant has the burden of proof at trial (for example, in this matter Respondents have the burden of proving by providing appropriate documentation that material is not a solid waste or is conditionally exempt from regulation, per 40 C.F.R. §261.2(f)), the movant must show by a preponderance of the evidence that that burden has been met. *Mercury Vapor*, 2011 EPA ALJ LEXIS 15 at 14 (July 14, 2011). Respondents have not met that burden in Respondents' Motion.

IV. Unitene LE and Unitene AGR Are Wastes

Pursuant to OAC § 3745-51-02(F), Respondents have the burden to prove the material received by CIS was not a waste. Respondents must demonstrate that there is a known market for the material and that "they meet the terms of the exclusion or exemption." OAC § 3745-51-02(F). In so doing, Respondents must "provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a

waste, or is exempt from regulation." *Id.* Respondents have provided this Court no such documentation from WCI, and Respondents have made no such demonstration that Unitene LE and Unitene AGR are not wastes. Therefore, Respondents have failed to meet their burden, and, based on this alone, this Court should find that each Unitene material is a waste.

Respondents dispute only whether the IFF materials constitute a waste. Respondents concede that the JLM waste shipment was a waste, but for their assertion that it was not burned for energy recovery. *See* Respondents' Motion at 79.[1] Accordingly, Sections III.A. and III.B, of this Response, below, regarding secondary materials concern the IFF materials only.

As background, under the applicable regulatory scheme, similar to the Respondents' description of the federal definition of "solid waste", the Ohio Administrative Code (OAC) defines "waste" as follows:

> A "waste" is any discarded material that is not excluded by paragraph (A) of rule 3745-51-04 of the Administrative Code or that is not excluded by variance granted under rules 3745-50-23 and 3745-50-24 of the Administrative Code.

OAC § 3745-51-02(A)(1). Therefore, in order to be a "waste", the materials at issue must be deemed "discarded materials". In turn, the Ohio regulations define "discarded material" as follows:

> A discarded material is any material which is:
> (a) Abandoned, as explained in paragraph (B) of this rule; or

---

[1] "Respondents do acknowledge the JLM test shipment of K022 received on November 21, 2005, would be waste if the Presiding Officer determines that it was burned for energy recovery." Respondents' Motion at 79.

(b) Recycled, as explained in paragraph (C) of this rule; or
(c) Considered inherently waste-like, as explained in paragraph (D) of this rule; or
(d) A military munition identified as a waste in rule 3745-266-202 of the Administrative Code.

OAC § 3745-51-02(A)(2). Thus, a material may be "waste" if it is "recycled", but not all recycled material is a "waste":

> Materials are wastes if they are recycled or accumulated, stored, or treated before recycling, as specified in paragraphs (C)(1) to (C)(4) of this rule.
> . . . (2) Burning for energy recovery.
> (a) Materials noted with an asterisk in column 2 of table 1 of this rule are wastes when they are:
> (i) Burned to recover energy; or
> (ii) Used to produce a fuel, or are otherwise contained in fuels (in which cases the fuel itself remains a waste).
> (b) However, commercial chemical products listed in rule 3745-51-33 of the Administrative Code are not wastes if they are themselves fuels.

OAC § 3745-51-02(C).

As Respondents noted, in determining whether a material is a "waste", the regulatory scheme described above requires an analysis of both the nature of the material and the manner in which it is recycled. Hazardous Waste Management System; Definition of Solid Waste, 50 Fed. Reg. 614, 619 (Jan. 4, 1985). To help analyze the nature of the material, the Ohio regulations provide a list of "secondary" materials, which may constitute wastes, depending on the manner in which they are recycled. *See* OAC § 3745-51-02, Table 1. The listed secondary materials include, *inter alia*, by-products that are burned for energy recovery and commercial chemical products that are burned for energy recovery.[2] *See Id.*

[2] Table 1 also includes "spent materials". *See* OAC § 3745-51-02, Table 1.

In this case, the IFF materials were "by-products" being recycled by being burned for energy recovery.[3] In the alternative, if this Court decides that the materials at issue are products, then the IFF materials are commercial chemical products being burned for energy recovery. In contrast, in their motion, Respondents argue that (A) "Unitene is a product or co-product, not a by-product" and (B) "Unitene is not a discarded commercial chemical product being recycled." Respondents' Motion at 34 and 41.

A. Unitene LE and Unitene AGR are By-Products

Unitene LE and Unitene AGR are by-products within the meaning of the applicable regulations. Identical to the federal definition that Respondents cited, the Ohio Administrative Code defines "by-product" as:

> [A] material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. By-product does not include a co-product that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

OAC § 3745-51-01(C)(3).

Respondents admit that a material's regulatory status is a "case-by-case" determination", and then proceed to "stack the deck" in favor of the conclusion they would like, by picking facts from five guidance letters that they hand-selected from numerous EPA guidance letters that address "by-products". Respondents' Motion at 36 and 39; *see also* CX129 at EPA23250 (list of guidance letters addressing by-products). The determination in this case need not rely on guidance letters or the facts lifted from

---

Unitene AGR is also a spent material since it is designated with hazardous waste listings F003 and F005, which are "spent non-halogenated solvents". *See* OAC § 3745-51-31(A).

[3] See also footnote 2.

these guidance letters, because Unitene's status as a by-product is evident from a plain reading of the regulatory definition of "by-product".

As noted above, the regulatory definition of "by-product" provides examples of materials that constitute by-products. OAC § 3745-51-01(C)(3). The examples include distillation column bottoms.[4] *Id.* It is unnecessary for this Court's analysis to proceed any further, because Unitene LE and Unitene AGR constitute exactly that – distillation column bottoms. *See* Clark Supp. Decl. at ¶6 (Attachment A). The record is replete with evidence as such.

First, Unitene LE is a [redacted].

[redacted]

[4] [redacted]

[redacted]

Second, Unitene AGR constitutes [redacted]

[redacted]

[5] Because [redacted]

[redacted]

[6] In their Motion, Respondents [redacted]

[redacted]

[redacted]

[redacted]

[7] Respondents [redacted]

[redacted]

[redacted]

For all of the forgoing reasons both Unitene materials constitute distillation column bottoms. As distillation column bottoms, Unitene LE and Unitene AGR are expressly included in the definition of solid waste, and this Court need not analyze any additional factors.

If this Court decides to analyze additional factors in determining the regulatory status of Unitene LE and Unitene AGR, then the relevant factors demonstrate that both materials are by-products. Respondents relied on the following factors, which they selected from several EPA guidance letters, to assert that Unitene LE and Unitene AGR were co-products:

(1) whether the Unitene materials were intentionally produced;
(2) whether the Unitene materials were fit for end use "as is";
(3) whether the Unitene materials were manufactured to specifications;
(4) whether the Unitene materials were residual;
(5) whether the Unitene materials were produced for consumption by customers and marketed to typical industrial consumers of such products;
(6) whether Unitene provided revenues for IFF and employees consistently thought of Unitene as a useful, marketable and valuable product; and
(7) whether Unitene was handled and marketed in the same manner as any other of its many products.

Respondents' Motion at 37-38. While Respondents submit blanket statements concluding that each factor weighs in favor of deeming the Unitene materials co-products, Respondents rarely cite to facts in the record that support such statements. And, in consideration of these factors, the record demonstrates that Unitene LE and Unitene AGR are by-products.

1. Unitene LE and Unitene AGR Were Not Intentionally Produced

Respondents assert that [redacted] Respondents' Motion at 37. However, Respondents fail to provide any facts that support this assertion. [redacted]

[8] Both [redacted] Despite

[redacted][9].

2. Unitene LE and Unitene AGR Are Not Fit for End Use "As Is"

Respondents submit the conclusory statement that [redacted] Respondents' Motion at 37. This statement is simply false. The record demonstrates that [redacted]

Respondents' efforts to highlight this distinction, it should be of no significance in this case. After all, RCRA does not regulate wastes based upon their name, but rather based upon their constituents and their potential to harm human health and the environment.

[9] *See* "Complainant's Memorandum in Support of Its Motion for Partial Accelerated Decision as to Liability" at 23-24; 31-33 ([redacted]).

[redacted]

Furthermore, [redacted]

3. Unitene LE and Unitene AGR Were Not Manufactured to Specifications

Respondents assert that [redacted]. While it is true that [redacted]

[redacted]

First, [redacted]

[redacted]

Additionally, [redacted]

[redacted][10]

4. Unitene LE and Unitene AGR Are Residual

Respondents assert that [redacted] Respondents' Motion at 38. Once again, Respondents [redacted]

[10] Respondents [redacted]

[redacted].[11] *Id.*

Additionally, [redacted]

[11] Respondents suggest that [redacted]

[redacted]

Therefore, Unitene is residual.

5. Unitene Was Not Produced for Consumption by Customers; Nor Was Unitene Marketed to Typical Industrial Consumers of Such Products

Respondents argue that [redacted]

[redacted]

6. Unitene Did Not Consistently Provide Revenues for IFF and Employees Did Not Consistently Think of Unitene as a Useful, Marketable and Valuable Product

Respondents summarily conclude that [redacted] Respondents' Motion at 38. This conclusion is unwarranted.

The materials [redacted]

[redacted][12]

[12] As explained in "Complainant's Memorandum in Support of Its Motion for Partial Accelerated Decision as to Liability" at 24-33, [redacted]

7. Unitene Was Not Marketed by IFF in the Same Manner As Any of Its Many Other Products

Respondents argue that [redacted]. Respondents' Motion at 38. However, Respondents [redacted]

Based on all of the foregoing, Respondents have not only failed to provide this Court with significant documentation to satisfy their burden and prove that Unitene is not a waste pursuant to OAC § 3745-51-02(F), but Respondents have also failed to

[redacted]

demonstrate that Unitene is most similar to those co-products discussed in the guidance letters discussed. Rather, Unitene is a by-product that was not intentionally produced and was unfit for end use without substantial processing.

B. Alternatively, Unitene LE and Unitene AGR Are Commercial Chemical Products

Should this Court find that Unitene is a product or a co-product, Unitene is still subject to RCRA regulations because it constitutes a commercial chemical product that was burned for energy recovery, pursuant to OAC § 3745-51-02(C)(2), Table 1.[13] Respondents accurately explain that commercial chemical products are only regulated when discarded. Respondents' Motion at 42. However, Respondents fail to recognize that commercial chemical products are wastes when "recycled in ways that differ from their normal manner of use." Hazardous Waste Management System; Definition of Solid Waste; Corrections, 50 Fed. Reg. 14216,14219 (Apr. 11, 1985). Furthermore, OAC § 3745-51-33 explains that commercial chemical products are hazardous waste "when, in lieu of their original intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel."

In this case, should this Court find that Unitene is a product, its intended use is as [redacted]. The only evidence that Respondents have set forth, indicating that Unitene may be an intentionally produced product, demonstrates that it was intended for [redacted].

[13] Section V, below, explains why, if they are deemed to be commercial chemical products, Unitene LE And Unitene AGR are not "fuels" under OAC § 3745-51-02(C)(2)(b) [40 C.F.R. § 261.2(c)(2)(ii)].

[redacted]. Therefore, when Unitene was burned for energy recovery, it was recycled in a manner that differed from its "normal manner of use" – as [redacted]. Moreover, simply by being burned as a fuel, Unitene is explicitly deemed a hazardous waste, pursuant to OAC § 3745-51-03.

V. The Use Of K022, Unitene LE And Unitene AGR In The Blast Furnace Constitutes "Burning For Energy Recovery" Under OAC § 3745-51-02(C)(2) [40 C.F.R. § 261.2(c)(2)]

Respondents have crafted an alternate universe where the burning of their hazardous waste in a blast furnace in replacement of coke defies fundamental thermodynamics and 70% of the "energy from carbon is . . . chemically bound to the hot metal." Respondents' Motion at 50; "Technical Report on Blast Furnace Issues in the Matter of Carbon Injection Systems LLC, et al. Docket No. RCRA-05-2011-09" written by Frederick C. Rorick ("Rorick") at 3, 13, 14. Only by creating this alternate universe are Respondents able to claim that the hazardous waste that they sold to WCI (for burning in its blast furnace) was not a solid waste, but instead was a recycled material "[u]sed or reused as ingredients in an industrial process to make a product. . . " or "[u]sed or reused as effective substitutes for commercial products" (40 C.F.R. § 261.2(e)(1) and OAC § 3745-51-02(E)(1)), and was not a material "burned for energy recovery, used to produce a fuel, or contained in fuels" (40 C.F.R. § 261.2(e)(2) and OAC § 3745-51-02(C)(2)(a)) (in which case its hazardous waste blend would revert to being a waste by virtue of the manner of its "recycling").

In the real world, when CIS' fuel is injected at the tuyere level it is immediately combusted to produce or recover heat energy and chemical energy. Fruehan Supp. Decl. at ¶ 13 (Attachment C). The combustion of the hydrocarbons creates heat energy, which replaces the heat energy of the displaced coke. *Id.* The combustion of the hydrocarbons also provide chemical energy in the form of reducing gases, which are necessary for the chemical reactions that convert iron oxide into iron. *Id.* Neither the carbon in the oil, nor the CO and H_2 in the reducing gases created by the combustion of hydrocarbons enters the iron.[14] *Id.* at ¶ 21. The idea that in the iron making process energy is "chemically bonded" to the hot metal is not consistent with fundamental thermodynamics. *Id.* Once these fundamentals of thermodynamics are restored, Respondents' hazardous waste blend is nothing more than a material burned in the blast furnace to recover heat energy and chemical energy, and thus both a solid waste and a hazardous waste subject to the RCRA regulations that prevail here on earth.

Respondents are correct when they state that in order for a material to be a hazardous waste, it must first be a "waste." Respondents' Motion at 43. Respondents also are correct when they state that "materials are not wastes when they can be shown to be recycled by being used as ingredients in an industrial process to make a product, provided the materials are not being reclaimed, or used as effective substitutes for commercial products, so long as they are not burned for energy recovery, used to produce a fuel or contained in fuels." *Id.* Finally, Respondents correctly cite to the applicable

---

[14] A small amount of carbon (about 10%) from coke goes into solution in the metal. See Fruehan Decl. at ¶ 16, attached to Complainant's Motion.

regulatory scheme providing exceptions from the definition of "solid waste" for recycled materials:

> (1) Materials are not solid wastes when they can be shown to be recycled by being:
>
> (i) Used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed; or
>
> (ii) Used or reused as effective substitutes for commercial products; or
>
> (iii) Returned to the original process from which they are generated, without first being reclaimed or land disposed. . . .
>
> (2) The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process (described in paragraphs (e)(1) (i) through (iii) of this section): . . .
>
> (ii) Materials burned for energy recovery, used to produce a fuel, or contained in fuels; . . .

40 C.F.R. § 261.2(e)(1) and (2) and OAC § 3745-51-02(E)(1) and (2). However, Respondents are wrong as to the facts.[15] The hazardous waste blend that Respondents

---

[15] As noted above, in enforcement actions under subtitle C of RCRA, where the respondent claims that a certain material is not a solid waste, the burden is on the respondent to demonstrate that there is a known market or disposition for the product and that they meet the terms of the exclusion or exemption. 40 C.F.R. § 261.2(f). In doing so a regulated facility must provide "appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste." Id.

The contemporaneous evidence that exists regarding the burning of the CIS's blended fuels to recover energy is [redacted]

sold to WCI and that WCI burned in its iron-making blast furnace was not used or reused as ingredients in an industrial process to make a product. Their hazardous waste blend also was not used or reused as an effective substitute for a commercial product. Instead, the hazardous waste blend that Respondents sold to WCI and that WCI burned in its iron-making blast furnace was burned for energy recovery. Because the hazardous waste blend was burned for energy recovery under 40 C.F.R. § 261.2(e)(2) and OAC § 3745-51-02(E)(2), the exceptions from the definition of "solid waste" for recycled materials

[redacted].

Absent contemporaneous evidence of facts establishing that their hazardous waste blend was being used by WCI as an "ingredient," Respondents now resort to post hoc rationalizations which defy the laws of thermodynamics.

provided under 40 C.F.R. § 261.2(e)(1) and OAC § 3745-51-02(E)(1) do not apply. To understand how this conclusion was reached, it is necessary to understand what happens inside the blast furnace.

U.S. EPA provided a detailed explanation of blast furnace operations in its "Memorandum In Support Of Its Motion For Partial Accelerated Decision" at pages 37-42. Relevant here is short recap and some additional information to make clear that Respondents' hazardous waste blend was being burned for energy recovery. As a factual matter, at the tuyere level of most blast furnaces, oil, natural gas, or powdered coal (all of which are forms of hydrocarbon) is injected along with oxygen enriched air into the bottom of the blast furnace through the tuyeres as an energy source to replace some of the coke used in iron production. Fruehan Supp. Decl. at ¶ 13. Oil is sometimes one of the hydrocarbon materials, or the only material, injected in the bottom of the furnace to replace some of the coke. *Id.* When the oil is injected at the tuyere level it is immediately combusted to produce or recover heat energy and chemical energy. *Id.* The combustion of the hydrocarbons creates heat energy, which replaces the heat energy of the displaced coke. *Id.* The combustion of the hydrocarbons also provide chemical energy in the form of reducing gases, which are necessary for the chemical reactions that convert iron oxide into iron. *Id.*

Heat energy is needed inside the blast furnace to heat the reactants and to supply the heat energy necessary for the reactions. *Id.* Heat is supplied to the blast furnace in three ways: by combustion of coke; combustion of injectants; and the heat in the air blast. *Id.* Two of these three heat inputs are derived from injectants (the combustion of the injectants creates heat in the blast furnace and some of the heat in the air blast comes

from returning heat from the top gases created by combustion of the injectants back into the hot air blast) at the tuyere level. *Id.* This heat energy is quantifiable as discussed in the next paragraph.

Chemical energy is needed inside the blast furnace to cause chemical reactions. The combustion of the oil injectants provides chemical energy in the form of carbon monoxide (CO) and hydrogen (H_2), which act as reducing gases by striping the oxygen from iron ore (Fe_2O_3) and from FeO to create pure iron (Fe). *Id.* This chemical energy is also quantifiable, as discussed in the next paragraph.

The creation of both heat energy and chemical energy through the combustion of injectants can be explained with an example. As explained by Dr. Fruehan:

> Assume 1 kilomole of carbon or 12 kilograms of carbon, is contained in material injected into the blast furnace. Initially the carbon is oxidized to CO releasing 114 Mj (million joules) of heat energy by the reaction C + ½ O_2 = CO. As the CO rises in the furnace, it releases chemical energy by stripping oxygen from the iron oxide forming CO_2.
>
> If all the CO is converted to CO_2 281 Mj of chemical energy is available. Based on the mass balance supplied by the Respondents about 55% of the CO is converted to CO_2. Therefore, by forming the CO approximately 155 Mj of energy is used in converting Fe_2O_3 to FeO and FeO to Fe. Finally, the off-gas which contains the remaining CO (45%) is burned outside the furnace to produce heat for other purposes[16] releasing 126 Mj of heat.
>
> This simple example illustrates the first law of thermodynamics, namely energy is conserved. Whenever carbon (C) is converted to CO_2 a total of 395 Mj of energy is available which can be heat or chemical energy.
>
> In evaluating the energy consumption of a blast furnace the universal accepted manner is to calculate the total energy by converting all of the carbon to CO_2 and all of the hydrogen to H_2O with oxygen. Therefore, all

---

[16] The off-gas is burned outside the blast furnace to heat the hot air blast injected at the tuyere level.

> of the carbon and all of the hydrogen is considered to release energy in the process.
>
> The injected material, by producing reducing gases, also supplies energy because it lowers the amount of energy required to remove oxygen from the Fe_2O_3 and FeO.

Fruehan Supp. Decl. at ¶¶ 18, 19, 20.

In sum, the oil injected at the tuyere level serves the purpose of being the fuel that provides the heat to raise hot blast temperatures to optimum levels and also serves the purpose of ensuring that appropriate furnace gas composition conducive to iron ore reduction is maintained. The combustion of the oil produces the reducing gases. *Id.* at ¶ 21. The carbon in the injected oil does not enter the iron. *Id.* The carbon in the liquid iron comes from the coke that was introduced at the top of the blast furnace column. *Id.* The carbon in the oil is essentially completely combusted to CO and H_2 and is an energy source. *Id.* The oil injected at the tuyere level cannot serve as a source of carbon incorporated into the iron in the iron making process, because it is combusted almost instantly upon injection at the tuyere level. *Id.* Similarly, the reducing gases CO and H_2 function in the furnace reactions only, and are not ingredients that are added to the iron. *Id.*

Based on the foregoing, the only conclusion that can be reached is that Respondents' hazardous waste blend was burned by WCI for energy recovery under 40 C.F.R. § 261.2(e)(2) and OAC § 3745-51-02(E)(2), and that the exceptions from the definition of "solid waste" for recycled materials "used or reused as ingredients in an industrial process" or "used or reused as effective substitutes for commercial products" provided under 40 C.F.R. § 261.2(e)(1) and OAC § 3745-51-02(E)(1) do not apply.

Respondents would like to create the impression that their hazardous waste blend was "used as an ingredient" by citing to the report of their expert, Mr. Frederick C. Rorick, and stating that "[t]he total energy balance of the furnace shows that energy from the carbon is either chemically bound to the hot metal (70%), or is simply lost, not recovered, to top gases, hot slag, and the furnace walls."[17] Respondents' Motion at 50.

---

[17] Respondents assert that iron can only be produced from iron oxide through use of carbon, stating:

> It is not possible to recover iron from iron ore simply by heating it, even to the point of melting:
>
> If we attempted to produce iron just by heating the ore, without the reducing gases, the result would just be hot pieces of iron ore. If we heated it much further, past the point of melting, the result would be hot liquid iron oxide. Neither hot rocks nor hot liquid iron oxide are suitable to produce steel.
>
> (Rorick Report, p.8). The conversion of iron ore to iron requires carbon. The process that changes iron ore (Fe_2O_3) to iron (Fe) is a chemical reaction - it would not occur simply by application of high temperature or heat without carbon. Without the carbon source acting as a reducing agent in this reaction, the pure liquid iron ("Fe") cannot be produced. Thus, carbon is an essential chemical ingredient in the iron-making process.

Respondents'' Motion at 44-45. Respondents are wrong. In this regard Dr. Fruehan states:

> I also disagree with Mr. Rorick's conclusion that iron cannot be produced simply by heating iron oxide and without using reducing gases produced through carbon combustion. Rorick at 8. In fact, if iron oxide is brought to a high enough temperature, then oxygen would disassociate from the iron oxide and would produce iron (and not just "hot pieces of iron ore" or "hot liquid iron oxide") without the help of reducing gases. Iron can also be produced from iron ore without CO and hydrogen using other elements, for example, aluminum.

Fruehan Supp. Decl. at ¶ 25.

The assertion that "energy" from the carbon is "chemically bound to the hot metal" can charitably be characterized as misleading. In this regard, Dr. Fruehan states:

> The oil injected at the tuyere level cannot serve as a source of carbon incorporated into the iron in the iron making process, because it is combusted almost instantly upon injection at the tuyere level. Similarly, the reducing gases CO and H_2 function in the furnace reactions only, and are not ingredients that are added to the iron. In this regard, I disagree with Mr. Rorick's statement that "70% of the energy supplied by the coke and hydrocarbon is converted into energy that is chemically bonded to the hot metal." Rorick at 3. The idea that in the iron making process energy is "chemically bonded" to the hot metal (Rorick at 3, 13, 14) is not consistent with fundamental thermodynamics.

Supp. Decl. Fruehan at ¶ 21. Simply, and as even Respondents' expert seems to agree by stating that energy comes from the use of carbon in the blast furnace, the hazardous waste blend was combusted by WCI for "energy recovery" (both heat and chemical energy) and the exceptions from the definition of solid waste for "recycled" materials is not available here.

Of course, Respondents' "misunderstanding" of blast furnace operations and the process by which iron oxide becomes iron is understandable, given their expert's reliance on the "Summary Evaluation and Assessment of Carbon and Hydrocarbon Raw Materials for Iron Reduction" written by Jeschar and Dombrowski. Mr. Rorick highlights two conclusions from the work of Jeschar and Dombrowski:

- The carbon and hydrocarbon carriers used for the reduction of iron ore cannot be classified as fuels as they cannot be replaced by another perhaps chemically inert energy carrier or other non-physical energy source
- These materials should therefore be classed as chemical raw materials as their components are involved in the chemical reactions of the iron ore reduction

Rorick at 3. Reliance on this report comes with caveats, because it was written with goal of avoiding the classification of carbon and hydrocarbon used in the production of iron as carbon and hydrocarbon subject to the European Union's carbon tax. In short, to ensure that iron produced in the European Union remained internationally competitive, the carbon and hydrocarbons used in iron production needed to be classified in a way that avoided taxes, or, not as fuels, which would increase the cost of production. Fruehan Supp. Decl. at ¶ 22. Accordingly, Jeschar and Dombrowski wrote their report to conclude that carbon and hydrocarbon carriers should be classed as chemical raw materials for a specified purpose.

Because Jeschar and Dombrowski wrote their report with a specific agenda in mind (to protect the steel industry in the European Union from carbon taxes that would raise the costs of production and thus make their steel uncompetitive with steel produced elsewhere), Mr. Rorick's other conclusion that flows from their work should not be accepted. Simply, it is wrong to reject the "Cadence" discussion published by the United States Environmental Protection Agency at 50 Federal Register 49164, as Respondents and their expert suggest. Fruehan Supp. Decl. at ¶ 23. Accordingly, it remains appropriate to evaluate the hazardous waste blend sold by Respondents burned by WCI through the example of "Cadence" as described at 50 Federal Register 49164, and as discussed at pages 45-46 of U.S. EPA's Memorandum In Support Of Its Motion For Partial Accelerated Decision.[18]

---

[18] The conclusion that K022 wastes are a fuel when burned in a blast furnace is

consistent with EPA's conclusion regarding Cadence Product 312 (Cadence), discussed in the preamble to the Boiler and Industrial Furnace regulations. 50 Fed. Reg. 49,164, 49,171-74. Cadence is a blend of hazardous still bottoms and other hydrocarbon-based waste that was patented for use as an injectant in blast furnaces. *Id.* at EPA49171. Because Cadence has a heating value of 10,500 to 14,000 BTU/lb, EPA determined that Cadence was burned for energy recovery, 50 Fed. Reg. at 49,164, 49,173-74. Furthermore, EPA explained:

> EPA does not believe that the question of jurisdiction over the Cadence product (or other similar waste-derived materials) need turn narrowly on the question of whether it is burned partially for energy recovery . . . These still bottoms are not similar to raw materials customarily used in the iron-making process (i.e., toxic chlorinated solvents are not a typical feed or energy source to the iron-making process). The recycling practice, as well as prior transportation and storage has the potential to cause substantial harm to human health and the environment if conducted improperly.

Id.

The heating value of Cadence, 10,500 to 14,000BTU/lb is far less than the heating value of CIS' blended fuels. *See* CX24 at EPA 13153. Even if the constitution of K022 and Cadence differs slightly from that of the IFF materials, the analysis of whether the material was burned for energy recovery remains the same. Regardless of its characteristics, the IFF material, like K022 and Cadence, serves as a supplement for coke in the blast furnace. However, they are not similar to the raw materials customarily used in a blast furnace. Any supplement for coke is an alternate heat source or fuel, which is burned for energy recovery.

VI. Unitene LE And Unitene AGR Are Not "Fuels" Under OAC § 3745-51-02(C)(2)(b) [40 C.F.R. § 261.2(c)(2)(ii)]

As discussed in section V.A.3.a.1.b.i of Complainant's Motion, Unitene LE and Unitene AGR are by-products. *See* Complainant's Motion at 17-35. If, however, this Court finds that Unitene LE and Unitene AGR are either co-products or products (and not by-products), then this Court must also conclude that these two materials are commercial chemical products. *See* Complainant's Motion at 35-36. Pursuant to OAC § 3745-51-02(C)(2), commercial chemical products listed in 3745-51-33 are wastes when burned for energy recovery.[19] The exception is found in OAC § 3745-51-02(C)(2)(b) [40 C.F.R. § 261.2(c)(2)(ii)], which states: "commercial chemical products listed in § 261.33 are not solid wastes if they themselves are fuels." OAC § 3745-51-02(C)(2)(b) [40 C.F.R. § 261.2(c)(2)(ii)]. Although Respondents argue otherwise, Unitene LE and Unitene AGR are not themselves "fuels" under OAC § 3745-51-02(C)(2)(b) [40 C.F.R. § 261.2(c)(2)(ii)], which states: "commercial chemical products listed in § 261.33 are not solid wastes if they themselves are fuels." Respondents' Motion at 53-58; OAC § 3745-51-02(C)(2)(b) [40 C.F.R. § 261.2(c)(2)(ii)].

Although there is no case law which directly addresses this issue, it is helpful to look to the preamble to the analogous federal rule as well as EPA references to the rule in Federal Register notices and communication from EPA to the regulated community. In the preamble to the analogous federal rule at 40 C.F.R. § 261.2(c)(2)(ii), EPA noted that:

> *Off-specification fuels* burned for energy recovery also are not by-products, and so would not be considered to be wastes under this

---

[19] *See also* 40 C.F.R § 261.2(c)(2)(A)(the federal equivalent to the Ohio regulation).

> provision. An example provided in the comments was of natural gas pipeline condensate. The condensate contains many of the same hydorcarbons found in liquefied natural gas, and certain higher hydrocarbons that also have energy value. It is generated in the pipeline transmission of natural gas. This condensate is not considered to be a waste when burned for energy recovery.

Hazrdous Waste Management System; Definition of Solid Waste, 50 FR 614 (January 4, 1985), n. 18 (emphasis added). The EPA RCRA Orientation Manual gives a similar example:

> Conversely, commercial products intended to be burned as fuels are not considered solid wastes. For example, *off-specification jet fuel* (e.g., a fuel with minor chemical impurities) is not a solid waste when it is burned for energy recovery because it is itself a fuel.

RX88 at CIS01350 (emphasis added). A Federal Register publication of a proposed rule regarding the identification of non-hazardous secondary materials that are solid waste also contains a reference to 40 C.F.R. 261.2(c)(2)(ii), and cites the following examples of "fuels":

> Commercial chemical products that are themselves fuels, such as *off-specification fuels*, including gasoline, jet fuel, kerosene, diesel, etc., are not solid wastes when burned as fuels if that is their intended purpose (*40 CFR 261.2(c)(2)(ii)*).

Identification of Non-Hazardous Secondary Material That Are Solid Waste, 75 FR 31844, 31873 at n. 51 (June 4, 2010) (emphasis added). [redacted].

Also of interest is the list of benchmark fuels used in the rulemaking establishing the comparable fuels exclusion. 40 C.F.R. § 262.38. In the comparable fuel exclusion, hazardous waste-derived fuels that meet specification levels comparable to fossil fuels for concentrations of hazardous constituents and for physical properties that affect burning are exempted from the regulatory definition of solid waste. *Id.* Although EPA ultimately

chose liquid fossil fuels as the benchmark fuels (gasoline, No.2 fuel oil, and No.6 fuel oil), the Agency considered "a range of fuels": gases (natural gas, propane); liquids (gasoline and fuel oils); and solids (coal, coke, and peat). Hazardous Waste Combustors; Revised Standards; Final Rule--Part 1: RCRA Comparable Fuel Exclusion; Permit Modifications for Hazardous Waste Combustion Units; Notification of Intent To Comply; Waste Minimization and Pollution Prevention Criteria for Compliance Extensions, 63 Fed. Reg. 33782, 33785 (June 19, 1998). This list provides a good sample list of traditional fuels.

Turning to communication from EPA to the regulated community, it is helpful to examine documents contained in EPA's Definition of Solid Waste Compendium & RCRA Online. *See* CX130; RCRA Online.[20] These communications show that the Agency considers certain factors when deciding if materials are themselves fuels under OAC § 3745-51-02(C)(2)(b) [40 C.F.R. § 261.2(c)(2)(ii)]:

- Whether the material is often used as a fuel. RX87 at CIS01314;
- Whether the material has an established history of use as a commercial fuel source. RX87 at CIS01315 (where the material in question had a history of use as a commercial fuel source "dating back to the 1700's");
- Whether the material can still be used (and is used) to replace more traditional fossil fuels. RX87 at CIS01315;
- Whether the material has a heating value which is comparable to other fuels such as gasoline, diesel, and propane (approximately 18,000 to 20,000 Btu/lb). RX87 at CIS01315;
- Whether the material is normally the component of a fuel such as gasoline. RCRA/Superfund Hotline Monthly Summary (November 1986)(Attachment D); and

[20] Note that Respondents routinely pluck only certain documents of the thousands which EPA makes available for guidance for the regulated community through its online databases (Definition of Solid Waste Compendium and RCRA Online). *See* CX127-140.

- What the intended purpose of the commercial chemical product is. Letter from Devereaux Barnes, Director, Characterization and Assessment Division, Office of Solid Waste and Emergency Response, EPA, to Joe Haake, McDonnell Douglas (July 31, 1989); letter from Michael J. Petruska, Chief, Regulatory Development Branch, EPA, to John W. Osburne, United Beechcraft, Inc. (February 6, 1995)(Attachment E)

In this case, [redacted]

The following EPA communications with the regulated community also emphasize that off-specification fuels are the primary type of material which are commercial chemical products which are themselves a fuel and not a solid waste under 40 C.F.R. § 261.2(c)(2)(ii):

- Crude sulfate turpentine (CST) is a fuel within 40 C.F.R. § 261.2(c)(2)(ii). Letter from Elizibeth Cotsworth, Director, Office of Solid Waste, EPA, to Richard Wassertrom, American Forest & Paper Association (August 2, 2002), RX87;
- Off-specification fuels, including gasoline, jet fuel, kerosene, diesel, are fuels within 40 C.F.R. § 261.2(c)(2)(ii). Letter from David Broussard, Director, Characterization and Assessment Division, EPA, to Dale Gable, Environmental Inspector, Office of Waste Management, Division of Environmental Protection (July 11, 1994)(Attachment F); letter from Michael J. Petruska, Chief, Regulatory Development Branch, EPA, to John W. Osburne, United Beechcraft, Inc. (February 6, 1995)(Attachment E);
- Gasoline is a fuel within 40 C.F.R. § 261.2(c)(2)(ii). Free products from an underground storage tank corrective action that are not normally used as fuels are solid wastes if they are burned for energy recovery. Letter from Jeffrey D. Denit,

Deputy Director, Office of Solid Waste, EPA, to Davis Bozaan, Groundwater Technology (November 25, 1992), RX90;

- Benzene (U019) is normally a component of gasoline, and is a fuel within 40 C.F.R. § 261.2(c)(2)(ii). RCRA/Superfund Hotline Monthly Summary (November 1986)(Attachment D);
- Gasoline is a fuel within 40 C.F.R. § 261.2(c)(2)(ii). Letter from Marcia E. Williams, Director, Office of Solid Waste, EPA, to Joan Keenan (March 19, 1986)(Attachment G);
- Jet fuel when burned as kerosene is a fuel within 40 C.F.R. § 261.2(c)(2)(ii). Letter from Marcia E. Williams, Director, Office of Solid Waste, EPA, to Richard Weaver, Aero Sport, Inc., (March 8, 1986)(Attachment H);
- Waste petroleum products (characteristic hazardous waste) which are mixed with used oil results in material (characteristic hazardous waste) which is a fuel within 40 C.F.R. § 261.2(c)(2)(ii) is the waste is burned for energy recovery in a boiler or industrial furnace. Letter from Marcia E. Williams, Director, Office of Solid Waste, EPA, to Francis L. Corden (Enviropact of Tampa Bay) (December 23, 1986)(Attachment I); and
- Unused off-specification jet fuel is a fuel within 40 C.F.R. § 261.2(c)(2)(ii). Letter from Devereaux Barnes, Director, Characterization and Assessment Division, Office of Solid Waste and Emergency Response, EPA, to Joe Haake, McDonnell Douglas (July 31, 1989)(Attachment J).

Respondents make much of EPA's January 1995 communication with Bruce Gelber (United States Department of Justice) regarding a distillate material named "LX-830". RX 37. However, this letter is not directly on point – it addresses whether a material is a co-product or a by-product, not whether a material is a fuel within 40 C.F.R. § 261.2(c)(2)(ii). Therefore it is irrelevant to the topic at hand.

Respondents' Motion also refers to EPA's August 2002 communication with Richard Wasserstrom (American Forest & Paper Association) wherein EPA determined that crude sulfate turpentine (CST) is a "fuel" within 40 C.F.R. § 261.2(c)(2)(ii). RX87. Respondents incorrectly assert that the same determination can be made as to Unitene LE and Unitene AGR because [redacted] Respondents' Motion at 56. However, Unitene LE and Unitene AGR are not the same as CST.

In the case of Unitene LE, [redacted]

[redacted]

EPA acknowledges that CST is [redacted]

Unitene AGR is an even more distant relative of CST. As explained in Section V.A.3.a.1.b.i.B of Complainant's Motion, [redacted]

[redacted] Unitene LE and Unitene AGR are not "fuel" within 40 C.F.R. § 261.2(c)(2)(ii).

Respondents also cite for support EPA Region IV's February 1995 communication with J. M. Baggett (Bush Boake Allen, Inc.), wherein EPA determined that "boiler fuels derived from crude sulfate turpentine" are "product fuels and not waste derived fuels." CX56 at EPA17218. However, it is unclear how similar these materials are to Unitene LE and Unitene AGR. In any event, EPA indicates that it was a "close call", decided after "careful consideration of the facts, affidavits, turpentine fuel patents, and the physical evidence collected." *Id.* No further details regarding the characteristics of the boiler fuels derived from crude sulfate turpentine are given in the letter, so a detailed comparison cannot be made to Unitene LE and Unitene AGR. *Id.* Additionally, 40 C.F.R. § 261.2(c)(2)(ii) is not cited in this letter. *Id.*

Finally, Respondents' Expert Report from Dr. Sass, which it submitted in an attempt to show that Unitene LE and Unitene AGR are "they themselves are fuels", is replete with errors. OAC § 3745-51-02(C)(2)(b) [40 C.F.R. § 261.2(c)(2)(ii)]. The errors are explained in David Clark's First Supplemental Declaration at paragraphs 17-21. Clark Supp. Decl. at ¶¶ 17-21.

VII. Officers Scott Forster and Eric Lofquist Are Liable as Operators of the CIS Facility

As explained in Section V.A.5 of Complainant's Motion, Respondents Forster and Lofquist are directly liable as operators. Both Forster and Lofquist exercised active and pervasive control over facility operations, and are therefore liable as operators under RCRA.

Respondents argue otherwise by misstating the law on operator liability and then incorrectly applying the facts to the law in this case. Specifically, Respondents misconstrue *In the Matter of Southern Timber Products, Inc. D/B/A Southern Pine Wood Preserving Company and Brax Batson*, RCRA (3008) Appeal No. 89-2, 1992 EPA App. LEXIS 15 at **23-35 (Feb. 28, 1992). In that RCRA case, the Secretary/Treasurer (Brax Batson) of a corporation was not shown to be an operator and thus not personally liable. The court noted while "[i]t is beyond serious doubt that a facility may have more than one operator where responsibility for the overall operation is shared among two or more persons", "[t]his is not to say that one who has any operational responsibility at a RCRA facility is an operator." *Id.* at **23 and 25. The court's emphasis was on whether or not the officer of a corporation has active and pervasive control over the overall facility operations. *Id.* at **32 and 34. The court then looked at three decisions which had applied the term "operator". First was a state court case, *Wisconsin v. Rollfink*, 475

N.W.2d 575 (Wis. 1991), where the court relied upon several factors to find a corporate officer liable as an "operator" and "established a liability standard rooted in the definition of "operator" itself: whether the corporate officer or shareholder is responsible for the overall operation of the facility". *In the Matter of Southern Timber Products*, 1992 EPA App. LEXIS at *29. Next was a federal case, *U.S. v. Environmental Waste Control, Inc.*, 710 F.Supp. 1172 (N.D.Ind. 1989), *aff'd*, 917 F.2d 327 (7th Cir. 1990), where "[a]lthough the Court ultimately imposed liability upon [a corporate officer]" by relying upon several factors, on summary judgment the Court had "rejected the argument that substantial activity at a RCRA facility by a corporate officer standing alone automatically renders him an operator". *In the Matter of Southern Timber Products*, 1992 EPA App. LEXIS at *30. Third was another federal case, *U.S. v. ILCO, Inc.*, No. CV85-H-823-S, 1990 U.S. Dist. LEXIS 20976 (N.D.Ala. Dec. 10, 1990), where the court relied upon several different factors in determining that a corporate officer was liable as an "operator." *In the Matter of Southern Timber Products*, 1992 EPA App. LEXIS at *32. The court compared the facts it had to the factors examined in the other three cases and ultimately determined that the record did not establish that the corporate officer, Brax Batson, exercised such "active and pervasive control" over the overall facility operations as to justify finding him to be an "operator". *In the Matter of Southern Timber Products*, 1992 EPA App. LEXIS at *34. Nowhere did the court in *In the Matter of Southern Timber Products* expressly reject "U.S. EPA's interpretation of the operator definition to include any corporate officer who authorizes, controls, or personally participates in the violating activity". Respondents' Motion at 64.

CONTAINS CONFIDENTIAL INFORMATION-SUBJECT TO PROTECTIVE ORDER

As discussed in Section V.A.5 of Complainant's Motion, when the facts in this case are applied to the factors laid out in *In the Matter of Southern Timber Products*, it is apparent that both Forster and Lofquist exercised active and pervasive control over facility operations, and are therefore liable as operators under RCRA. In coming to the opposite conclusion, Respondents attempt to explain away certain facts in this case, and ignore other facts. To begin, [redacted].

Respondents also argue that [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Respondents also indicate that [redacted]

[redacted]

[redacted]

[redacted][21]

Respondents' Motion also emphasizes that [redacted]

[redacted]

[21] Forster also [redacted]

[22] Forster also [redacted]

[redacted]

Respondents also argue that Forster and Loquist were [redacted]

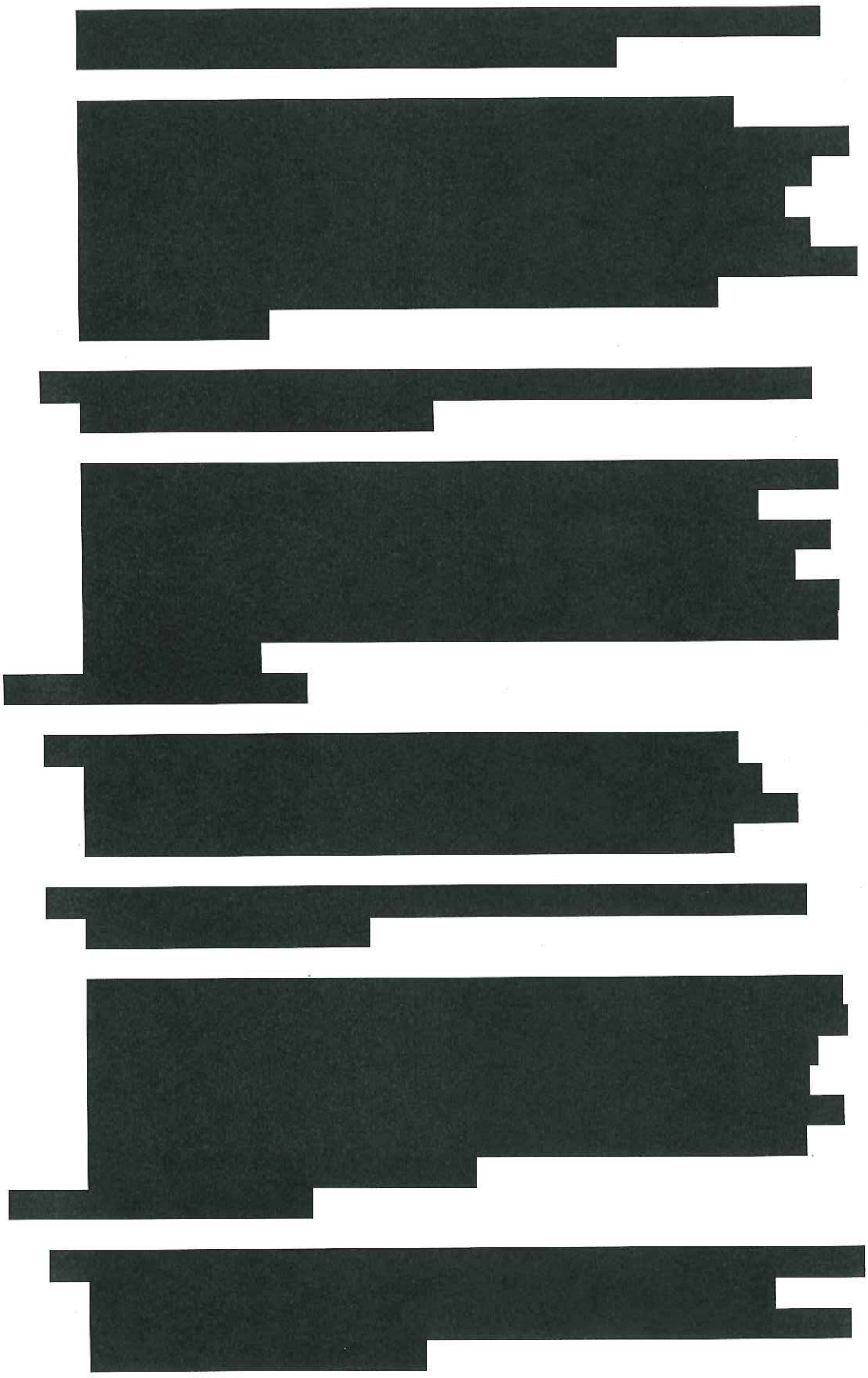
[redacted]

Respondents also ignore the evidence showing Forster and Lofquist [redacted]

[redacted]

- 8/11/04 CIS files LLC Articles of Organization. CX48.

[redacted]

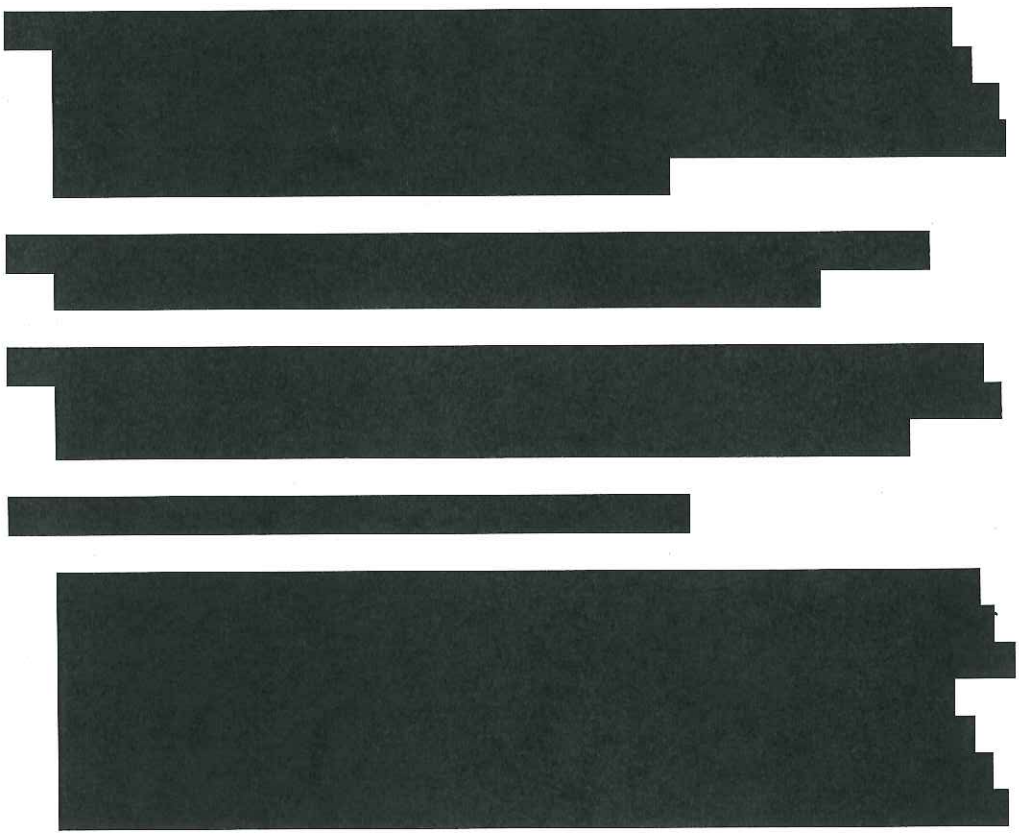


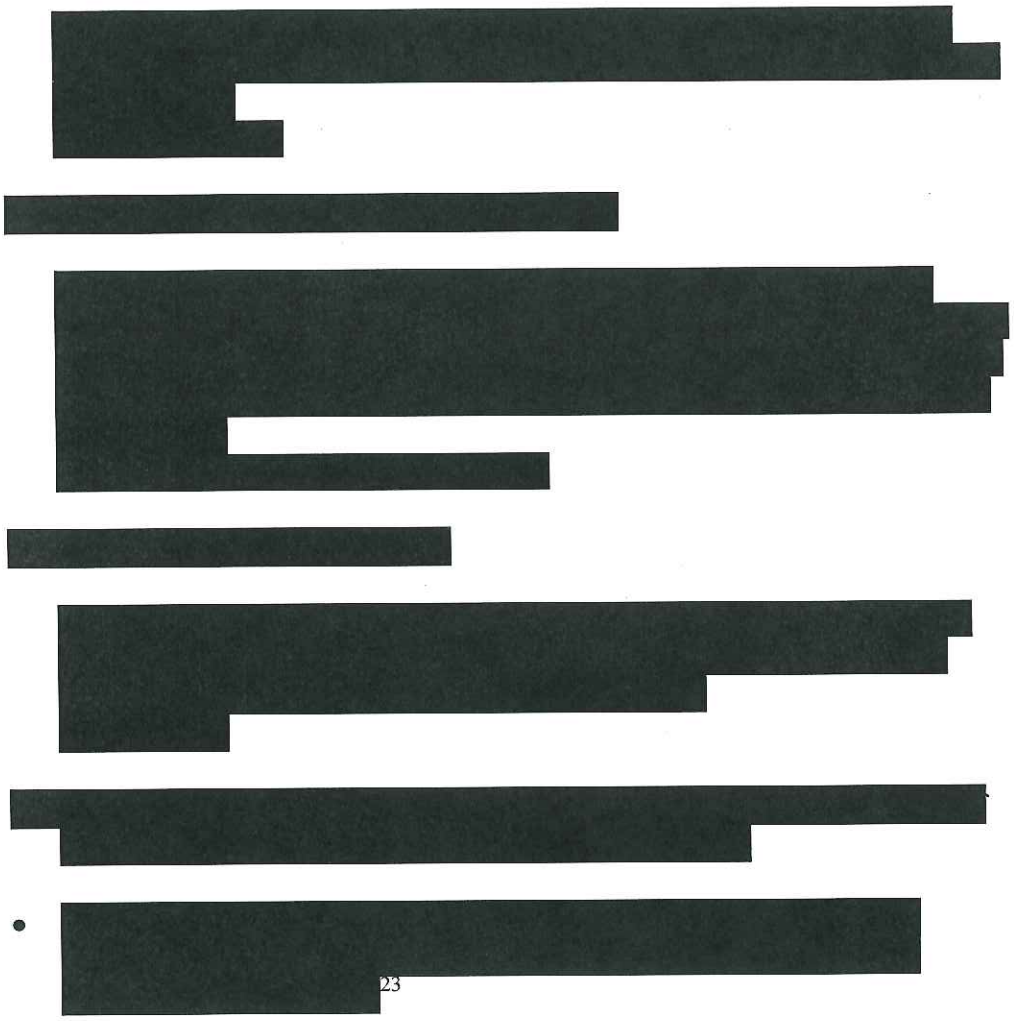
- 10/21/05 broker IWM sent letter to OEPA regarding use of K022 as a "replacement for coke and natural gas as carbon-injected steel mills." CX13 at EPA10137.

- 10/27/05 OEPA exchanges a series of emails with Ernie Willis of IWM regarding IWM's 1021/05 letter. CX13. Among other things, OEPA states the following:

  We are not denying the request. We are simply saying that when the K022 is used in this manner it is a regulated hazardous waste. The generator must manage it in compliance with the applicable hazardous waste requirements and the owner of the blast furnace must comply with the applicable hazardous waste requirements. This would include management standards and permitting requirements for storage prior to burning the hazardous waste and the combustion requirements found in the boiler and industrial furnace rules. We believe that it is being burned for energy recovery and material recovery. Both of these uses make it subject to regulation as a hazardous waste.
  CX13 at 10154-55.

- 11/3/05 Forster responds to Troy Charpia (IWM) asking him if he received "all of Ernie's email to the oepa about the K022 material." Forster states "I did". CX13 at EPA10296.





Not surprisingly, Respondents attempt to shift responsibility for and knowledge of the inquiries into the regulatory status of the waste at issue to the now-defunct Forster/Lofquist corporation named General Environmental Management LLC ("GEM"), as well as generators and brokers of the waste in question. Respondents' Motion at 8-14. Specifically, Respondents assert that

[23] Significantly, the Unitene wastes, which constitute the all but one of the shipments which serve as the basis for the Complaint in this matter were shipped after these unsuccessful direct and indirect attempts to get the regulator to agree that hazardous waste with a high carbon content burned in a blast furnace was not a solid waste.

[redacted]. In fact, one entire section of Respondents' Motion is titled "General Environmental Management LLC's 2005-2006 Investigation of the Purchase of Exempted Wastes for Carbon Injection Systems LLC". Respondents' Motion at 11-12. The documents, however, paint quite a different picture.

To start, [redacted] All indications are that there was little if no separation of duties between GEM and CIS for Forster and Lofquist. Thus, the actions Forster and Lofquist took on behalf of GEM can be attributed to the work of Forster and Lofquist at CIS. Additionally, the actions taken to