**CONTAINS CONFIDENTIAL INFORMATION-SUBJECT TO PROTECTIVE ORDER**

**UNITED STATES**
**ENVIRONMENTAL PROTECTION AGENCY**

**BEFORE THE ADMINISTRATOR**



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

**COMPLAINANT'S MEMORANDUM IN SUPPORT OF ITS MOTION FOR PARTIAL ACCELERATED DECISION AS TO LIABILITY**

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**CONTAINS CONFIDENTIAL INFORMATION-SUBJECT TO PROTECTIVE ORDER**

## I. INTRODUCTION

Complainant, pursuant to 40 C.F.R. §§ 22.16 and 22.20 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 Memorandum in Support of its Motion for Partial Accelerated Decision as to Liability and respectfully requests that the Presiding Officer enter an order finding that Respondents Carbon Injection Systems LLC ("CIS"), Scott Forster, and Eric Lofquist ("Respondents") are liable for violations of the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901-6992k, and authorized Ohio (and parallel federal) implementing regulations. As explained in more detail later in this memorandum, the Respondents violated RCRA when, without a RCRA permit, they stored and treated hazardous wastes at a fuel oil storage facility that Respondents operated located at Gate #4 Blast Furnace Main Avenue, Warren Township, Ohio (the "Facility") from May 2005 to March 2010. Respondents stored K022, D001, D035, F003, and F005 hazardous wastes that they obtained from JLM Chemicals, Inc. ("JLM"), located in Blue Island, Illinois, and from and International Flavors and Fragrances ("IFF") facility in Augusta, Georgia, in 18,000-20,000 gallon tanks at the Facility. Respondents then treated these hazardous wastes by blending them with used oil to meet fuel specifications. The hazardous waste and used oil fuel blend was sequenced into the Respondents' "day tank" at the Facility. The Respondents sold the hazardous waste and used oil fuel blend to WCI Steel, Inc. ("WCI Steel"), and the contents of the day tank were fed into WCI Steel's blast furnace, where the hazardous waste and used oil fuel blend was burned for energy recovery.

Under these facts and as alleged in the Complaint, Respondents are liable for violations of RCRA, and the authorized Ohio (and parallel federal) implementing regulations, because they:

stored and treated hazardous waste without a permit; failed to hold a public meeting associated with obtaining a RCRA permit; did not develop and follow a sufficient written waste analysis plan from May 2005 to March 2010; had facility personnel who failed to successfully complete a program of classroom instruction or on-the-job training that taught them to perform their duties in a way that ensured the facility's compliance with the requirements of the standards for owners and operators of hazardous waste, treatment, storage and disposal facilities, and failed to maintain documents and records related to this training; failed to make or attempt to make arrangements with emergency responders that would assist those responders in reacting to emergencies associated with the Facility and its operations; accepted hazardous waste at the Facility for treatment and storage without an accompanying manifest and failed to prepare and submit an unmanifested waste report to the Ohio Environmental Protection Agency ("OEPA") within fifteen days after receiving the waste; owned or operated the Facility without a written closure plan identifying the steps necessary to perform partial or final closure of the facility; owned or operated the Facility without a detailed written estimate of the cost of closing their hazardous waste management units and failed to comply with applicable financial assurance requirements; owned or operated the Facility without obtaining and keeping on file at the facility a written hazardous waste tank assessment; and failed to determine and provide land disposal notification and certification pursuant to the land disposal requirements.

## II. RELEVANT STATUTORY, REGULATORY AND POLICY BACKGROUND

The Solid Waste Disposal Act, as amended by the Resource and Conservation Recovery Act of 1976 and the Hazardous and Solid Waste Amendments (collectively, "RCRA") is a comprehensive environmental statute that authorizes EPA to regulate hazardous wastes from cradle to grave, in accordance with the safeguards and waste management procedures of Subtitle

C, 42 U.S.C. §§ 6921-6939. It was enacted to promote the national policy of reducing or eliminating hazardous waste and, where waste is nevertheless generated, to provide for the treatment, storage, or disposal of such waste "to minimize the present and future threat to human health and the environment." 42 U.S.C. § 6902(b). RCRA is a comprehensive environmental statue that governs the treatment, storage, and disposal of solid and hazardous waste. *Meghrig v. KFC W., Inc.*, 516 U.S. 479, 483 (1996). In *Hinds Investments, L.P. v. SCSK Auto, Inc.*, 654 F.3d 846, 850 (9th Cir. 2011), the Ninth Circuit recently stated that "[i]n society's efforts to constrain or limit environmental pollution that is detrimental to all, RCRA is an important tool and a key federal statute that, if properly enforced, will help preserve our environment from the effects of harmful pollution." A Michigan District Court recently found that "Congress enacted the RCRA to end the environmental and public health risks associated with mismanagement of hazardous waste." *Saline River Properties, LLC v. Johnson Controls, Inc., et al.*, Case Nos. 10-10507 and 10-13406, 2011 U.S. Dist. LEXIS 119516, at *16 (E.D. Mich. Oct. 17, 2011) (quoting *United States v. Commonwealth of Kentucky*, 252 F.3d 816, 821-22 (6th Cir. 2001)).

The improper management of hazardous waste poses serious threats to human health and the environment. For example, the mismanagement of hazardous waste has resulted in fires, explosions, or the generation of toxic gases that have killed or seriously injured workers. RX88 at CIS01345. Similarly, careless waste disposal has been linked to respiratory illnesses, skin diseases, and elevated levels of toxic materials in the blood and tissue of humans and domestic livestock. *Id.* In addition, the improper disposal of hazardous waste has polluted streams, rivers, lakes, and other surface waters, killing aquatic life, destroying wildlife, and stripping area of vegetation. *Id.*

The specific hazardous wastes involved in this matter (K022[1], D001[2], D035[3], F003, and F005[4]) are all regulated due to specific concerns that EPA has with their effect on human health and/or the environment.

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[1]K022 (distillation bottom tars from the production of phenol/acetone from cumene) contain toxic and potentially carcinogenic organic substances, including phenol and polycyclic aromatic hydrocarbons (PAH) as the pollutants of concern. 40 C.F.R. § 32, CX141 at EPA23999. The hazards posed by the K022 are caused by two principle waste components: tars and phenols. CX141 at EPA24003-4. At the time EPA's K022 Listing Document was published, the primary means of disposal of K022 were landfilling and incineration. CX141 at EPA24004. Of particular concern was mismanagement of the incineration process resulting from improper combustion conditions which could lead to the release into the atmosphere of vapors containing hazardous products of incomplete combustion. CX141 at EPA24005. In terms of human health, the K022 Listing Document found that tars containing PAHs were toxic and were suspected mutagens and carcinogens, while phenol is "very toxic" and ingestion of phenol can lead to digestive disturbances, skin eruptions, damage to liver and kidneys and death. CX141 at EPA24007-8. In terms of ecological receptors, the K022 Listing Document found that ingestion of tars caused anemia and extensive liver damage in ducks, while a small amount of phenol is lethal to rainbow trout. CX141 at EPA24008-9.

[2]D001 wastes are listed because of their ignitability (those wastes with a flash point of less than 140 degrees Fahrenheit). 40 C.F.R. § 261.21. Ignitability is a hazardous characteristic, because improperly managed ignitable waste poses a substantial present or potential danger to human health and the environment. CX124 at EPA22853-82. D001 "wastes can cause fires which directly damage the environment by heat and smoke production or indirectly damage the

Since 1980, under RCRA Subtitle C, EPA has developed a comprehensive program to ensure that hazardous waste is managed safely from the moment it is generated; while it is transported, treated, or stored; and until the moment it is finally disposed. This cradle-to-grave management system establishes a number of requirements, including requirements for: permitting (40 C.F.R. Part 270); treatment, storage and disposal facilities (40 C.F.R. Part 264), and; Land Disposal Restrictions (40 C.F.R. Part 284).

Section 3006 of RCRA, 42 U.S.C. § 6926, provides that EPA may authorize states to administer and enforce their own hazardous waste programs in lieu of the federal Subtitle C RCRA (hereinafter Subtitle C) program. EPA will approve a state's request for authorization if

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environment by providing a vector through which other hazardous wastes can be dispersed." CX124 at EPA22853.

[3]D035 is a solid waste - specifically Methyl Ethyl Keytone ("MEK") - which exhibits the characteristic of toxicity at concentrations of 200mg/L and above. 40 C.F.R. § 261.24. MEK has detrimental health effects. The chief effect is narcosis, but MEK is also a strong irritant of the eyes and nose. CX125 at EPA22938.

[4]Finally, the material at issue was designated F003 for ethyl benzene and methanol and F005 for MEK. 40 C.F.R. § 261.31. CX11 at EPA7922. EPA's F001-F005 Listing Document found that while ethyl benzene, methanol and MEK were ignitable and, therefore, hazardous for the reasons explained in footnote 2, above, these spent solvents are likely to contain other toxic constituents since they become spent when they have become contaminated with other materials. CX126 at EPA23054-55, EPA23090 and EPA23141. These other materials may render the materials hazardous as well: "spent solvents are likely to contain other toxicants at levels of regulatory concern". CX126 at EPA23131.

it determines, among other things, that the state's program is equivalent to and consistent with the federal one. 42 U.S.C. § 6926(b). Following its authorization of a state's regulatory program, EPA enforces the authorized state regulations in lieu of the federal regulations within that state. A violation of any state provision authorized pursuant to Section 3006 of RCRA constitutes a violation of RCRA subject to the assessment of civil penalties and issuance of compliance orders as provided in Section 3008 of RCRA, 42 U.S.C. § 6928. 42 U.S.C. § 6926(d). The Ohio RCRA regulations that U.S. EPA is enforcing in this matter are all federally authorized.[5]

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[5] EPA publishes its authorization of state programs in the Federal Register, codifies them at 40 C.F.R. Part 272, and incorporates by reference therein the state statutes and regulations that EPA will enforce under Section 3008 of RCRA, 42 U.S.C. § 6928, in order to provide notice to the public of the scope of the authorized program in every state. Pursuant to Section 3006(b) of RCRA, 42 U.S.C. § 6926(b), the Administrator of U.S. EPA granted the State of Ohio final authorization to administer a state hazardous waste program in lieu of the federal government's base RCRA program effective June 30, 1989. Ohio; Final Authorization of State Hazardous Waste Management Program, 54 Fed. Reg. 27,170 (June 28, 1989). The Ohio statutes and regulations that have been authorized as part of the Subtitle C hazardous waste management program are published in the Federal Register and are codified at 40 C.F.R. § 272.1800-1801. Copies of the Ohio regulations in effect at the time of the violations were provided by EPA in its Rebuttal Prehearing Exchange and Complainant's First Supplemental Prehearing Exchange. *See* CX116-123 and CX 160.

## III. RELEVANT FACTUAL BACKGROUND

Respondents operated the Facility located at Gate #4 Blast Furnace Main Avenue, Warren Township, Ohio (the "Facility") from May 2005 to March 2010. CX2 at EPA29; CX5 at EPA6047; CX2 at EPA13130. Respondents installed a Fuel Oil Storage Facility at property located adjacent to the blast furnace at the RG Steel LLC facility (formerly known as Severstal Warren, Inc., Warren Consolidated Industries, Inc., and WCI Steel, Inc.) in Warren, Ohio. CX24 at EPA13130. The Facility provided notification to OEPA that it was a used oil processor and marketer on February 25, 2005. CX45 at EPA17139. Thereafter, the Facility received material from third party generators, blended it, and the blended material was sent from the Facility to WCI Steel, on May 11, 2005.[6] CX24 at EPA13130. The Facility consisted of ten storage tanks, one day tank and one oil spill/rain water collection tank. CX24 at EPA13156. The Facility operated until March 2010. The blast furnace was idled in October 2008, and materials were stored in the CIS tanks at that time. Blast furnace operations resumed in March 2010. CX5 at EPA6047 and EPA6050. [redacted]

Activities conducted by Respondents at the Facility included: blending used oil streams; blending used oil (both on-specification used oil and off-specification[7]) with virgin fuel products;

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[6] WCI Steel, Inc., has at times been known as Severstal Warren, Inc., and Warren Consolidated Industries, Inc. It is currently known as RG Steel LLC.

[7] Initially, the blast furnace facility burned on-specification used oil. Later, the blast furnace

blending used oil to meet fuel specifications; and marketing on-specification used oil fuel to a consumer. CX5 at EPA6063; CX29 at EPA16814. Respondents held K022, D001, D035, F003 and F005, discarded materials, in 20,000 gallon tanks before the material was transferred from the Facility for treatment, storage, disposal, burning or incineration elsewhere. CX2 at EPA33; CX24 at EPA13130; CX46 at EPA17145.

At all times relevant to the Complaint, Respondents obtained used oils, K022, D001, D035, F003 and F005, and other materials which were unloaded into storage tanks for sequencing into the Respondents' day tank. The Respondents' day tank fed the blast furnace at WCI Steel, where energy was recovered from the materials. On August 27, 2008, U.S. EPA conducted a Compliance Evaluation Inspection of the Facility. CX29. On February 8, 2008, U.S. EPA issued a Notice of Violation to Respondent CIS, alleging certain violations of RCRA. CX30. On April 28, 2008, Respondent CIS, submitted to U.S. EPA a written response to the Notice of Violation. CX31.

On February 8, 2008, U.S. EPA issued a RCRA Information Request to Respondent CIS. CX1. EPA received responses on March 27, 2008, and April 28, 2008. CX2 and CX4. On April 28, 2010, U.S. EPA issued a second RCRA Information Request to Respondent CIS. CX4. EPA received a response on June 15, 2010. CX5.

On August 31, 2010, U.S. EPA issued a Notice of Intent to File Administrative Complaint to Respondent CIS. CX35. On September 21, 2010, Respondent CIS submitted a response to the August 31, 2010, Notice of Intent to File Administrative Complaint. CX39. On October 26, 2010, U.S. EPA issued a Notice of Intent to File Administrative Complaint to Respondent Scott Forster. CX36. On November 9, 2010, U.S. EPA issued a Notice of Intent to

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facility also burned off-specification used oil. CX2 at EPA1851-1852.

File Administrative Complaint to Respondent Eric Lofquist. CX37. On February 8, 2011, U.S. EPA and all three Respondents met for a prefiling conference. EPA filed an Administrative Complaint on May 13, 2011. CX40. Respondents filed an Answer on July 14, 2011. CX41. The parties submitted prehearing exchange documents in fall 2011, and conducted depositions in early 2012.

## IV. STANDARD OF REVIEW

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). Motions for accelerated decision under 40 C.F.R. § 22.20(a) are akin to motions for summary judgment under Rule 56 of the Federal Rules of Civil Procedure. *In re BWX Techs., Inc.,* RCRA Appeal No. 97-5, 2000 EPA App. LEXIS 9 at *34-41 (Apr. 5, 2000). *See also 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 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). The movant has the initial burden of showing "no genuine issue of material fact exists and a party is entitled to judgment as a matter of law." 40 C.F.R. § 22.20(a). Once the movant meets its burden, the non-movant must demonstrate that an issue is both "material" and "genuine." *BWX Techs., Inc.*, 2000 EPA App. LEXIS 9 at *35. All of the evidence must be viewed in a light most favorable to the non-

movant. *SMS Demag Aktiengesellschaft v. Material Scis. Corp.*, 565 F.3d 365, 368 (7th Cir. 2009) (citing *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000)). However, in order to raise a genuine issue of material fact, the non-movant must present significant probative evidence from which a reasonable presiding officer could find in that party's favor by a preponderance of the evidence. *BWX Techs., Inc.*, 2000 EPA App. 9 LEXIS 39 at *40; *In re FRM Chem, Inc., et al.* Docket No. FIFRA-07-2008-0035, 2010 EPA ALJ LEXIS 18 at *8 (Sept. 13, 2010).

Additionally, where the movant has the burden of proof at trial (for example, in this matter EPA has the burden to prove its prime facie case), 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). In contrast, where the movant does not have the burden of proof at trial (for example, in this matter Respondents have the burden of proving their affirmative defenses and 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 has the lesser burden of "showing" or "pointing out" to the reviewing tribunal that there is an absence of evidence in the record to support the nonmoving party's case on that issue. *BWX Techs., Inc.*, 2000 EPA App. LEXIS 9 at *38-39 (citing *Celotex Corp. v. Catrett*, 477 U.S. 317, 323-24 (1986)).

## V. ARGUMENT

### A. Respondents Are Liable For Operating a Hazardous Waste Storage and Treatment Facility without A RCRA Permit

Respondents did not apply for or obtain a permit to own or operate their hazardous waste storage and treatment Facility. CX40 at EPA17077. Pursuant to Ohio Administrative Code (OAC) § 3745-50-40(A)(1) [40 C.F.R. § 270.10(f)(1)], no person shall begin physical

construction of a new hazardous waste facility without having submitted Part A and Part B of a permit application to the director of the Ohio EPA and having received an effective Ohio hazardous waste facility installation and operation permit. Also, pursuant to 3005(a) and (e) of RCRA, 42 U.S.C. § 6925(a) and (e); Ohio Revised Code §§ 3734.02 and 3734.05; and OAC § 3745-50-45; the owner and operator of a hazardous waste management unit is prohibited from operating a hazardous waste management unit except in accordance with a permit issued pursuant to RCRA. Respondents built and operated their Facility, where they stored and treated hazardous waste without a permit, in violation of Section 3005 of RCRA, 42 U.S.C. § 6925(a) and the regulations found at OAC §§ 3745-50-40 to 3745-50-66; 3745-54 to 3745-57; 3745-205 and 3745-256 [40 C.F.R. Parts 264, 40 C.F.R. §§ 270.1(c) and 270.10(a) and (d), and 270.13]. Respondents' storage and treatment of hazardous waste without a permit violated Section 3005 of RCRA, 42 U.S.C. § 6925(a) and the requirements of OAC §§ 3745-50-40 to 3745-50-66 [40 C.F.R. §§ 270.1(c) and 270.10(a) and (d), and 270.13].

As discussed in Section V.A.1-5, below, there is no genuine issue of material fact which exists as to the liability of the Respondents, and EPA is entitled to judgment on liability as a matter of law. The elements that must be established to demonstrate the liability of the Respondents are as follows:

- Respondents are "persons";
- CIS was a "facility";
- "Hazardous waste" was "stored" or "treated" at the CIS Facility; and
- The CIS Facility did not have a RCRA Subtitle C permit

### 1. Respondents CIS, Scott Forster, and Eric Lofquist Are Each A "Person" Under the EPA Authorized Ohio Subtitle C Program

In their Answer, Respondents admit that they were and are "persons" as defined by OAC § 3745-50-10(A)(88). CX41 at EPA17103. Accordingly, there is no genuine issue of material

fact that Respondents are "persons" for purposes of establishing liability.

### 2. CIS Was A "Facility" Under the EPA-Authorized Ohio Subtitle C Program

The relevant section of the EPA-authorized Ohio Subtitle C program defines "facility" as:

> (a) all contiguous land and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage or disposal operational units (E.G., one or more landfill, surface impoundments, or combinations of them).

OAC § 3745-50-10(A)(39).

The evidence establishes that the CIS Facility was a parcel of land containing ten storage tanks, one day tank and one oil spill/rain water collection tank. CX24 at EPA13156. As discussed in Section V.A.3., below, the facility was used to store or treat materials. In addition, Section V.A.3., below, explains the evidence showing that the materials were hazardous wastes. Thus, there is no genuine issue of material fact that the CIS Facility was a "facility" within the meaning of Ohio's authorized Subtitle C program.

### 3. Hazardous Wastes Were Stored and Treated At the CIS Facility

There is no genuine issue of material fact that hazardous wastes were shipped by JLM and IFF to the CIS facility. The JLM hazardous waste was shipped from JLM to the Ohio CIS Facility in November 2005. JLM was located in Blue Island, Illinois and used propylene and benzene to produce cumene, and then used cumene to produce phenol and acetone (JLM is no longer operating the facility). CX54 at EPA17201. Distillation bottom tars from the production of phenol or acetone are listed as EPA Hazardous Waste Code K022. 40 C.F.R. § 261.32, CX54 at EPA17201. JLM itself informed EPA in an information request response that it had shipped hazardous waste on November 21, 2005, to CIS by providing a copy of a shipping document.

CX19 at EPA12208.[8] [redacted]

The IFF hazardous waste was shipped from IFF's facility in Augusta, Georgia to the Ohio CIS facility on numerous occasions from August 2006 to February 2009. CX9 at EPA6928-7164. The IFF Augusta facility produces fragrance ingredients. CX9 at EPA6923. [redacted] Accordingly, hazardous waste was shipped from JLM and IFF to the CIS facility. The details of the storage and treatment of hazardous waste at the CIS Facility are discussed in V.A.3.b., below.

[8] Note that JLM also sent shipments of K022 to a separate Forster/Lofquist-owned/operated entity, General Environmental Management LLC ("GEM") on over one-hundred occasions (CX19 at 12170-12351), [redacted]

### a) The JLM and IFF Materials Were "Hazardous Waste"

The authorized RCRA regulations in Ohio define "waste" at OAC § 3745-51-02. In order for a material to be classified as a "hazardous waste", it must first be a "waste." OAC § 3745-51-03(A). Once a material is deemed to be a "waste" (and is not for some reason exempt from the definition of "waste") it must then be identified as listed or characteristic "hazardous waste." Finally, the materials must not be specifically excluded from the definition of "waste" or "hazardous waste" in order to be subject to RCRA regulations.

#### (1) The JLM and IFF Materials Were "Wastes"

##### (a) JLM Material

There is no genuine issue of material fact that the material JLM sent to CIS was a waste. One shipment of its K022 waste stream was sent to CIS on November 21, 2005, for use in the WCI Steel blast furnace. *See* CX19 at EPA12208. The regulatory status of this material is clear, as the name of JLM's materials was "Residue Column Bottoms." *Id.* JLM's Residue Column Bottoms were "generated continuously from the bottom of residue columns in the phenol plant." *Id.* at EPA12172. JLM has admitted that "[t]his material, due to its chemical makeup, falls within the K022 code." *Id.* Therefore, the JLM material that CIS purchased constituted a waste under OAC § 3745-51-02.

Additionally, the JLM waste stream has already been determined to be a "waste." On March 24, 2011, the Regional Judicial Officer for Region 5 granted Complainant's Motion for Default Order against JLM. CX54. The Complaint in that matter alleged that JLM had offered a hazardous waste for transport without a manifest in violation of RCRA and its implementing regulations. *Id.* JLM generated waste in the form of distillation bottom tars through its production of phenol and acetone. *Id.* at 3. The same distillation bottom tars are at issue

presently. *Id.* In her Default Order and Initial Decision, the Regional Judicial Officer explained that distillation bottom tars from the production of phenol or acetone from cumene are solid waste as that term is defined in 35 Illinois Administrative Code (IAC) § 721.102 [40 C.F.R. § 261.2]. *Id.* A default "constitutes an admission of all facts alleged in the complaint . . . ." *In Re Rocking BS Ranch, Inc.*, Docket No. CWA-06-2007-1974, CWA Appeal No. 09-04, 2010 EPA App. LEXIS 11, at *11 (April 21, 2010) (citing 40 C.F.R. § 22.17(a)). Therefore, the JLM waste stream at issue here is a waste under OAC § 3745-51-02.

Furthermore, JLM's K022 material was explicitly declared a waste by EPA when it is burned for energy recovery. *See* CX47 at EPA17146. In a letter to Ernie Willis of waste broker Innovative Waste Management ("IWM") on December 9, 2005, Margaret Guerriero of EPA Region 5's Waste, Pesticides and Toxics Division responded to a request that Ohio EPA and U.S. EPA determine whether the use of K022 as a coke supplement in a blast furnace requires it to be handled as a hazardous waste. *See* CX47. Director Guerriero explained that

> even if recycling of the solid waste involves use or reuse, but it is burned for energy recovery, used to produce a fuel, or contained in fuels, it remains a solid waste. The common use of the term "fuel" is any material used to produce heat or power by burning. A blast furnace receives some of its heat energy from the combustion of the coke that is charged into the furnace, as well as the combustion of material injected in the tuyeres. Combustion of the coke provides heat needed to melt the iron-bearing material in the furnace, and any substitute for coke is an alternate heat source or fuel. Therefore, the use of K022 in the blast furnace as a substitute for coke makes it a fuel.

CX47.

The only conclusion that can be drawn by the foregoing is that the JLM materials were a "waste" under OAC § 3745-51-02.

### (b) IFF Material

There is no issue of material fact that the material IFF sent to Respondent CIS was a "waste" under OAC § 3745-51-02. The regulation defines waste as any material that is discarded by being either abandoned, inherently waste-like, a certain military munitions, or recycled. OAC § 3745-51-02 (A)(1). In this case, Respondents *recycled* material.

To determine whether a recycled material is a "waste", one must examine: (1) the manner in which that material is recycled; and (2) the nature of the recycled material. Hazardous Waste Management System; Definition of Solid Waste, 50 Fed. Reg. 614, 619 (Jan. 4, 1985) (preamble to analogous federal regulation at 40 C.F.R. §261.2). The applicable regulation states that materials are "wastes" if they are recycled or accumulated, stored, or treated before recycling in the following ways:

> (1) used in a manner constituting disposal;
> (2) burned for energy recovery;
> (3) reclaimed; or
> (3) accumulated speculatively.

OAC § 3745-51-02(C)(1)-(4). The materials in this instance were recycled by being burned for energy recovery. To be a recycled material burned for energy recovery, the material must be:

> (a) Materials noted with an asterisk in column 2 of the table[9] contained in OAC § 3745-51-02 and
> (i) Burned to recovery energy; or
> (ii) Used to produce a fuel, or are otherwise contained in fuels (in which case 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 themselves are fuels.

OAC § 3745-51-02(C)(2)(a)-(b). The table contained in OAC § 3745-51-02 separates materials into seven categories, including by-products (listed in OAC § 3745-51-31 or 3745-51-32), by-

[9] The table in OAC 3745-51-02 can be found at CX160 at EPA024578.

products exhibiting a characteristic of hazardous waste, and commercial chemical products listed in OAC § 3745-51-33).[10] In this case, the IFF material is a by-product, or, alternatively, a commercial chemical product as defined by the table contained in OAC § 3745-51-02.

The IFF material is a waste because it satisfies each of the three steps in the regulatory definition explained directly above: (1) the IFF material is recycled (by being burned for energy recovery) (see Section V.A.3.a.1.iii, below); (2) the IFF material is marked with an asterisk in column 2 of table 1 of OAC § 3745-51-02 (is a by-product, or, alternatively, a commercial chemical product) (see Section V.A.3.a.1.i and ii., below); and (3) the IFF material is stored and treated before being recycled by being burned for energy recovery (see Section V.A.3.b, below). OAC § 3745-51-02(C)(2)(a)(i).

**(i) The IFF material is a by-product**

The IFF materials at issue are: by-products (listed in OAC §§ 3745-51-31 or 3745-51-32) and by-products exhibiting a characteristic of hazardous waste. A by-product is "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." OAC § 3745-51-01(C)(3). The analogous federal regulation is 40 C.F.R. §261.2(c)(2). In the preamble to 40 C.F.R. §261.2, three factors were established to help determine if a material is a by-product: (1) whether the material is "generally

[10] A technical correction to the federal rule which is analogous to this state rule clarified that although non-listed commercial chemical products which exhibit one or more of the hazardous waste characteristics (i.e., ignitability, corrosivity, reactivity, and extraction procedure (EP) toxicity) are not directly addressed, "their status would be the same as those that are listed…That is, they are not considered solid wastes when recycled except when they are recycled in ways that differ from their normal manner of use." 50 Fed. Reg. 14,216, 14,219 (Apr. 11, 1985).

of a residual character"; (2) whether the material was "produced intentionally or separately"; and (3) whether the material is "unfit for end use without substantial processing." Hazardous Waste Management System; Definition of Solid Waste , 50 Fed. Reg. at 614, 625. Case law has further clarified the term "by-product" as excluding co-products, which are materials "produced for use by the general public and suitable for end use essentially as-is." *In the Matter of Breentag Great Lakes, LLC*, Docket No. RCRA-5-2002-0001, 2004 EPA ALJ LEXIS 18, at *40-41 (June 2, 2004)(quoting 50 Fed. Reg. at 625). Co-products must be produced intentionally and used in their existing state as a commodity. *Id.*

[redacted]

Unitene LE and Unitene AGR are by-products because the materials are (1) generally of a residual character; (2) not produced intentionally or separately; and (3) unfit for end use without substantial processing. *Id.*

A description of the IFF Augusta facility and its processes demonstrates that Unitene LE and Unitene AGR are by-products, and, therefore are subject to RCRA regulations. IFF is "a leading global creator of flavors and fragrances used in a variety of consumer products." IFF Company Overview, http://www.iff.com/company/company-overview.aspx. [redacted] Iso E Super is sold for use in perfumes and soaps, and is described as having a "smooth, woody, amber" smell. *Id.* [redacted]

[redacted]

Generally, every chemical reaction has inputs (i.e., raw materials, energy) and outputs (products and by-products). Clark Decl. at ¶ 6 (Attachment A). Because no chemical reaction is 100% efficient, all organic chemical reactions create a desirable output (product) and an undesirable output (by-products). *Id.* at ¶ 7. The undesirable outputs consist of isomers that did not form in the intended fashion during the initial reaction. *Id.* These improperly structured isomers have the potential to negatively affect the quality of the final product; therefore, they are separated from the product through distillation processes. *Id.* Every chemical reaction also contains an excess of one reactant to ensure that the reaction yield is maximized. *Id.* The excess reactant is reusable if recaptured from the crude product through additional distillation processes. *Id.* These general principles of all chemical reactions are applicable to IFF's production and isolation of Iso E Super, as described below.

[redacted]

[redacted]

IFF portrays itself as a manufacturer of flavors and fragrances. IFF does not mention its manufacture of unrelated products on its website. *See* IFF Homepage, http://www.iff.com.[11] However, IFF also sells materials called Unitene LE and Unitene AGR, which are neither flavors nor fragrances. [redacted] Unitene LE and Unitene AGR are generated as by-products of IFF's production process.

**(A) Unitene LE**

[redacted]

[11] *See also* [redacted]

[12] [redacted]

[redacted]

Unitene LE is a "by-product" because it satisfies each of the factors in the preamble to 40 C.F.R. §261.2. Unitene LE is a material: (1) of a residual character; (2) which is not produced intentionally or separately; and (3) that is unfit for end use without substantial processing.

First, Unitene LE is material of a residual character. "Residue" is defined as "something that remains after a part is taken, separated, or designated or after completion of a process." "Residue". Merriam-Webster Online Dictionary, 2012. http://www.merriam-webster.com (29 Feb. 2012). [redacted] Therefore, Unitene LE is a residue.

Second, Unitene LE is not produced intentionally or separately. At no time did IFF intentionally initiate the manufacture of Unitene LE. [redacted] Accordingly, Unitene LE was not produced intentionally or separately.

[13] Prior to the naming of Unitene LE, IFF submitted to EPA a 2005 Comprehensive Biennial Report, which stated that the Augusta facility generated 6,486.80 tons of organic hazardous organic waste. CX165 at EPA025971. In 2007 and 2009, IFF reported that the Augusta facility generated only 460.44 tons and 25.23 tons of hazardous organic waste, respectively. CX166 at EPA025981, CX167 at EPA025997. Therefore, the sale of Unitene enabled IFF to reduce its generation of organic hazardous waste by 6461.57 tons.

IFF's own characterization of Unitene LE establishes that it was not produced intentionally. Unitene LE was, and continues to be, consistently described as a "by-product". *See e.g.*, [redacted].[14] Even as late as June 6, 2011, after IFF had received two information requests from EPA, had the opportunity to communicate with Respondents, and knew that EPA was investigating the regulatory status of its Unitene products, IFF sent a letter to EPA in which it referred to the material that would later be named "Unitene LE" as "by-products containing various fractions of streams of terpene derivatives." CX58 at EPA17223. Furthermore, in EPA's April 27, 2009 Information Request to IFF, EPA requested that IFF describe all of its products and the waste generated from each process at the IFF Augusta facility. CX8 at EPA6919. [redacted] This failure by IFF to classify any Unitene material as a product demonstrates that Unitene LE was not intentionally or separately produced by IFF.

[14] *See also* [redacted]

Finally, Unitene LE is unfit for end use without substantial processing and, therefore, satisfies the third factor establishing it as a by-product.[15] [redacted][16] Accordingly, Unitene LE could not be used as is. [redacted] Because Unitene LE required

[15] In order to meet the definition of "co-product" and be unregulated, a material must be suitable for end use essentially "as is." 50 Fed. Reg. at 614, 625.

[16] *See also* [redacted]

blending with other fuels before its use in the blast furnace, it was unfit for end use without substantial processing.

For the foregoing reasons, Unitene LE is a by-product as defined in OAC § 3745-51-01(C)(3) and used in column 2 of the table in OAC § 3745-51-02. *See also* 40 C.F.R. § 261.2(b)(3); 50 Fed. Reg. at 614, 625. However, in order to fulfill the definition of waste, as explained in the table in OAC § 3745-51-02, Unitene LE must not only be a by-product, but it also must be listed in OAC §§ 3745-51-31 or 3745-51-32, or exhibit characteristics of hazardous waste. Complainant addresses Unitene LE's hazardous waste characteristics in Section V.A.3.a.3.

**(B) Unitene AGR**

The generation of Unitene AGR is generally depicted at CX11 at EPA7924. [redacted] *See* CX162 at EPA025301. Therefore, it is necessary to rely primarily on the depositions of Thomas Guido, David Shepherd and Theresa Barry, current employees of IFF who were or are involved with the production of Unitene AGR, to understand the generation of Unitene AGR. [redacted]

[redacted] The following explanation of the processes in which each component is generated establishes Unitene AGR's regulatory status as a "by-product."

As detailed above, [redacted]

[17] *See also* CX162 at EPA025374-75.

[redacted]

[18] In EPA's February 12, 2010 Request for Information to IFF, EPA requested that IFF provide a list of the raw materials used to produce Unitene AGR. [redacted]

[redacted] Accordingly, the constituents of Unitene AGR can vary greatly and its exact composition at any given time is uncertain at best. Clark Decl. at ¶ 22.

[redacted] Moreover, permits to discharge from waste water pretreatment plants typically contain a limit on the amount of oil which can be discharged to the publicly owned treatment work.[19]

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[redacted]

[19] The federal regulations at 40 C.F.R. § 403.3 define a publicly owned treatment works (POTW) as a treatment works (as defined in Clean Water Act ("CWA") Section 212, 33 U.S.C. § 1292) that is owned by a state or municipality [as defined in CWA Section 502(4), 33 U.S.C. § 1362]. POTWs receive, primarily, domestic sewage from residential and commercial customers. Larger POTWs also typically receive and treat wastewater from industrial facilities (indirect

[redacted]

Unitene AGR is a by-product because it satisfies each of the factors in the preamble to 40 C.F.R. §261.2: (1) Unitene AGR is a material of a residual character; (2) which is not produced intentionally or separately; and (3) that is unfit for end use without substantial processing. *Breentag Great Lakes*, 2004 EPA ALJ LEXIS 18, at *40-41 (June 2, 2004).

First, Unitene AGR is a material of residual character. [redacted]

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dischargers) connected to the collection system. The types of pollutants treated by a POTW always include conventional pollutants (such as oil and grease) and may include nonconventional and toxic pollutants, depending on the characteristics of the sources discharging to the POTW. EPA's National Pretreatment Program (NPP) regulates the introduction of nondomestic (i.e., industrial and commercial) wastewater to POTWs. The NPP prohibits industrial and commercial indirect dischargers from discharging pollutants to a POTW that will pass through the POTW to receiving waters or interfering with POTW treatment processes or contaminating sewage sludge. In this way the POTW can control the amount of pollutants (including but not limited to oil and grease) it discharges to waters of the United States. See EPA's September 2010 NPDES Permit Writer's Manual. http://www.epa.gov/npdes/pubs/pwm_2010.pdf

[redacted] Therefore, Unitene AGR is residual in nature.

Second, Unitene AGR is not produced intentionally or separately. [redacted]

[20] [redacted]

[21] [redacted]

[redacted] In the February 12, 2010, Information Request from EPA to IFF, EPA requested "all records related to the Unitene AGR (or waste stream from the same generation point identified by a different name) sent offsite as hazardous waste in the past 5 years." CX10 at EPA7916. [redacted] RCRA does not allow IFF to simply decide when Unitene AGR is a hazardous waste and when it is a product. Also, IFF cannot create an unregulated, intentionally-manufactured product from a hazardous waste simply by giving it the "Unitene AGR" name. [redacted] It makes little fiscal sense for a company to intentionally and separately produce a hazardous waste of which it was required to pay to dispose.

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[redacted]

[22] While the manifests avoid using the name Unitene AGR, they document the shipping of Unitene AGR because they were provided in response to Request 4, which focused specifically on shipments of Unitene AGR as a hazardous waste. *See* CX10 at EPA7916.

Furthermore, as explained in relation to Unitene LE, above, IFF's own characterization of Unitene AGR establishes that it was not intentionally produced. Much like Unitene LE, Unitene AGR was, and continues to be, consistently described as a by-product by IFF and waste brokers.

[redacted][23] Because IFF has never consistently characterized Unitene AGR as a product, it is clear that Unitene AGR was not produced intentionally or separately.

Finally, Unitene AGR was unfit for end use without substantial processing, and therefore satisfies the third factor establishing it as a "by-product." As explained in detail above, [redacted]

[23] *See also* [redacted] CX58 (a letter in which IFF admits that prior to 2006 its terpene derivatives were by-products and hazardous waste, and in order to sell Unitene after 2006, IFF merely "segregated certain waste streams"); [redacted]

[redacted] Therefore, CIS was unable to sell the material to the blast furnace "as-is." [redacted][25]

[24] [redacted]

[25] [redacted]

Because it required blending with used oil before being used in the blast furnace, Unitene AGR was unfit for end use without substantial processing.

For the foregoing reasons, Unitene AGR is a by-product as defined in OAC § 3745-51-01(C)(3) and used in column 2 of the table in OAC § 3745-51-02. *See also* 40 C.F.R. § 261.2(b)(3); 50 Fed. Reg. at 614, 625. However, in order to fulfill the definition of waste, as explained in the table in OAC § 3745-51-02, Unitene AGR must not only be a by-product, but it also must be listed in OAC § 3745-51-31 or 3745-51-32, or exhibit characteristics of hazardous waste. Complainant addresses Unitene AGR's hazardous waste characteristics in Section V.A.3.a.3.

**(ii) Even if Deemed a Product, the IFF Material is a Commercial Chemical Product**

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. Pursuant to OAC § 3745-51-02(C)(2), commercial chemical products listed in 3745-51-33 are wastes when burned for energy recovery.[26] Furthermore, OAC § 3745-51-33 explains that commercial chemical products are hazardous wastes "when, in lieu of

[redacted]

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

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."

Unitene LE and Unitene AGR are not listed in OAC § 3745-51-33.[27] However, in the technical corrections to the equivalent federal rule, EPA clarified that although non-listed commercial chemical products which exhibit one or more of the hazardous waste characteristics (i.e., ignitability, corrosivity, reactivity , and extraction procedure (EP) toxicity) are not directly addressed, "their status would be the same as those that are listed...That is, they are not considered solid wastes when recycled except when they are recycled in ways that differ from their normal manner of use." Hazardous Waste Management System; Definition of Solid Waste; Corrections, 50 Fed. Reg. 14,216, 14,219 (Apr. 11, 1985). Therefore, non-listed commercial chemical products are considered solid wastes only when "recycled in ways that differ from their normal manner of use." *Id.* A material is recycled in ways that differ from its normal manner of use when it is burned for energy recovery. *Id.* As explained in Section V.A.3.a.3, while Unitene LE and Unitene AGR are not listed in 40 C.F.R. § 261.33, they are materials exhibiting a characteristic of hazardous waste (ignitability). Therefore, the Unitene materials constitute non-listed commercial chemical products. Also, as explained in Section V.A.3.a.1.b.iii, Unitene LE and Unitene AGR were burned for energy recovery in the WCI Steel blast furnace. Accordingly, if Unitene LE and Unitene AGR are not wastes by virtue of being by-products burned for energy recovery, both Unitenes are non-listed commercial chemical products burned for energy, and, therefore, Unitene LE and Unitene AGR are still wastes.

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[27] *See also* 40 C.F.R. § 261.33 (the federal equivalent to the Ohio list of commercial chemical products).

### (iii) The IFF Materials Were Burned for Energy Recovery

In addition to being a by-product or a commercial chemical product, a recycled material must be recycled in a particular manner to satisfy the definition of "waste." As explained above, materials are "wastes" if they are recycled or accumulated, stored, or treated before recycling in the following ways:

> (1) used in a manner constituting disposal;
> (2) burned for energy recovery;
> (3) reclaimed; or
> (3) accumulated speculatively.

OAC § 3745-51-02(C)(1)-(4).

The Unitene LE and Unitene AGR in this instance were recycled by being burned for energy recovery (and therefore a "waste") because they were "burned to recover energy" in WCI Steel's blast furnace. To be a recycled material burned for energy recovery (and therefore a "waste"), the material must be:

> (a) Materials noted with an asterisk in column 2 of the table contained in OAC § 3745-51-02 and
> (i) Burned to recovery energy; or
> (ii) Used to produce a fuel, or are otherwise contained in fuels (in which case 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 themselves are fuels.

OAC § 3745-51-02(C)(2)(a)-(b).

In this case, the materials in question were being stored and treated at CIS prior to being burned for energy recovery in a steel mill blast furnace. To understand how that occurred, it is necessary to understand first how a blast furnace generally works. Blast furnaces convert iron ore to pure liquid iron. Fruehan Decl. at ¶ 10 (Attachment B); *see* CX86 at EPA18464. To begin the process, raw materials, primarily coke, limestone, and iron ore ($Fe_2O_3$), are weighed

according to a certain recipe and loaded onto a conveyor belt. Fruehan Decl at ¶ 12. The conveyor belt carries the raw materials to the top of the blast furnace where they are then fed into the blast furnace column, a large shaft reactor. Freuehan Decl. at ¶ 13; Burning of Waste Fuel and Used Oil Fuel in Boilers and Industrial Furnaces, 50 Fed. Reg. 49,164, 49,171 (Nov. 29, 1985). Once inside, these raw materials descend through zones of the blast furnace column, each in which a different reaction occurs.

First, the temperature of the raw materials is raised in the preheating zone. Fruehan Decl at ¶ 21. When the raw materials reach the appropriate temperature, reactions begin in the ferric oxide zone. Fruehan Decl. at ¶ 22. In the ferric oxide zone, carbon monoxide (CO) and hydrogen ($H_2$), which are "reducing gases" released by the burning coke, convert iron ore ($Fe_2O_3$) to FeO. *Id.* This process is illustrated by the two chemical equations below:

$$Fe_2O_3 + CO \rightarrow 2FeO + CO_2$$

$$Fe_2O_3 + H_2 \rightarrow 2FeO + H_2O$$

*Id.*

Next, the materials descend into the ferrous reduction zone. Fruehan Decl. at ¶ 23. Here, the reducing gases (CO and $H_2$) convert some FeO, which was created in the ferric oxide zone above, to pure iron (Fe). *Id.* This process is called Indirect Reduction, and it is illustrated below. *Id.*

$$FeO + CO \rightarrow Fe + CO_2$$

$$FeO + H_2 \rightarrow Fe + H_2O$$

*Id.* The remainder of the FeO reacts with solid carbon to produce more iron (Fe). *Id.* This process is called Direct Reduction, and it is illustrated below. *Id.*

$$FeO + C \rightarrow Fe + CO$$

*Id.*

The materials then descend to the tuyere zone. All the processes above are fueled by a large volume of air preheated to 2000° F, which is injected near the bottom of the column, in the tuyere zone. 50 Fed. Reg. at 49,164, 49,172. The hot air blast burns the coke to produce heat energy and the reducing gases (CO and $H_2$) needed to drive the reactions above.

In the tuyere zone of most blast furnaces, oil, natural gas, or powdered coal (injectants) is injected into the column along with the hot air. Fruehan at ¶ 15. Just like coke, these injectants consist of hydrocarbons. *See* Fruehan at ¶ 27. Therefore, the injectants serve two functions. First, they are immediately combusted to provide energy, which replaces the energy of the coke it displaces. Fruehan at ¶ 26. This energy is necessary to raise the temperature of the materials in the furnace as well as fuel the chemical reactions that reduce iron ore to iron. Fruehan at ¶ 14. Second, the injectants provide reducing gases (CO and $H_2$) to the column. By providing reducing gases, the injectants lower the amount of energy required to remove oxygen from iron ore (Fe2O3) and FeO, and create iron. Fruehan at ¶ 29.

Essentially, these injectants serve the same function as, and are used as a supplement for, coke. Freuhan at ¶ 26. Blast furnace operators seek coke supplements because coke has become increasingly expensive since the 1960's and furnace productivity is increased by increasing the iron ore to coke volume ratio. 50 Fed. Reg. at 49,164, 49,172. By using more injectants, blast furnace operators are able to reduce the amount of coke added to the column. *Id.*

In the final stage of the iron-making process, materials descend to the base of the blast furnace column. Here, the ultimate product, liquid iron, is separated from iron slag, the by-product of iron production. *See* Fruehan ¶¶ 24; 17.

CIS's oil fuel, blended with hazardous waste from IFF, was burned in WCI Steel's furnace for energy recovery within the meaning of OAC § 3745-51-02(C)(2)(a) and consistent with this description of blast furnace operations. [redacted] The blended hazardous waste fuel of Respondent CIS served as an injectant in the tuyere zone, and therefore a coke supplement, as described above. Because it was used as an injectant, the blended fuel essentially served two functions. First, just like any injectant, the blended fuel was immediately combusted upon entering the column and provided heat energy, which replaces the heat energy of the displaced coke. *See* Fruehan at ¶ 27. Heat is required to fuel the reactions that reduce iron ore. *See* Fruehan at ¶ 27. Second, the blended fuel provided the reducing gases (CO and $H_2$) necessary to remove the oxygen from iron ore ($Fe_2O_3$) and FeO. *See* Fruehan at ¶ 28. By supplying reducing gases, the blended hazardous waste fuel also lowered the amount of energy required for the reduction reactions. *See* Fruehan at ¶ 29. Therefore, Respondent CIS' blended hazardous waste fuel, including the IFF hazardous waste, was burned to recovery energy both through combustion and through the provision of reductants.

The foregoing conclusion is consistent with the preamble to the final rule regarding the burning of waste fuels. *See* 50 Fed. Reg. at 49,164, 49,172. The preamble explains that fuel injectants "first behave as *bona fide* fuels by combusting to (ideally) carbon dioxide and water." *Id.* (emphasis in original). After the injectants are combusted, they act as ingredients to the

furnace reactions only, by providing reducing gases (CO and $H_2$), which fuel the reducing reactions. *Id.* The excess reducing gases, which were not used to reduce iron ore, are collected with the blast furnace "off gas." These off gases are combusted outside the furnace to supply energy to preheat air that is injected into the furnace through the tuyeres. Fruehan at ¶ 18; 50 Fed. Reg. at 49,172. In total, fuel injectants provide approximately 22% of the heat input to the blast furnace. 50 Fed. Reg. at 49,172 (*citing* 13 Kirk-Othmer Encyclopedia of Chemical Technology 742 (1981)). Therefore, as explained above, injectants serve a dual purpose of providing substantial energy and reductants. *Id.*

Respondents may focus solely on the blended hazardous waste fuel's provision of reductants, having already asserted that the IFF material is not a waste because it is recycled by being:

> (a) Used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed; or (b) Used or reused as effective substitutes for "commercial products" (OAC § 3745-51-02(E)(1).

CX39 at EPA16994. However, first it must be noted that this assertion ignores the energy that the fuel provides to the column upon initial combustion. *See* Fruehan at ¶ 27. Additionally, while CIS's blended fuel does provide reductants, it does not act as an ingredient of the final product. Rather, the injected fuel provides reducing gases, which lower the amount of energy needed for the reducing reactions to take place. *See* Fruehan at 29. The carbon of the injected fuel does not enter the final product because it is combusted into gases immediately upon entering the column. Fruehan at ¶ 30. All of the carbon in iron comes from coke. Fruehan at ¶ 30.

In rejecting the idea that CIS's blended hazardous waste fuel serves only as a reductant, and not an energy source, this Court should also consider the September 18, 2006 Information

Request Response sent jointly by Respondent CIS and another Forster/Lofquist company called General Environmental Management LLC ("GEM"), to OEPA, [redacted]

If this Court concludes that the reducing gases are an ingredient in the final product and chooses to ignore the heat energy contributed to the column upon initial combustion of the injectants, Respondents' argument still does not eliminate their liability. The preamble to the Definition of Solid Waste regulations specifically states:

> The regulations would also apply when an industrial furnace burns the same secondary material for both energy and material recovery. Examples are blast furnaces that burn organic wastes to recover both energy and carbon values…These activities are not so integrally tied to the production nature of the furnace as to raise questions about the Agency's jurisdiction. In addition, EPA believes that both the existing statute and the new legislation express a strong mandate to take a broad view of what constitutes hazardous waste when hazardous secondary materials are burned for energy recovery, and to regulate as necessary to protect human health and the environment.

50 Fed. Reg. at 614, 630-31(citations omitted). Because the IFF materials provide both ingredients and energy, they are subject to RCRA regulations, and the exemption in OAC § 3745-51-02(E)(1) does not help Respondents escape liability.

The burning of the CIS's blended fuels to recover energy is further evidenced by the agreement between Respondent CIS and WCI Steel. [redacted]

[redacted]

[28] It is worth noting that Respondents have repeatedly described the materials sent to WCI as a fuel. [redacted]

[29] A British Thermal Unit (BTU) is the "the amount of *heat* required to raise the temperature of one pound of water one degree Fahrenheit." "British Thermal Unit", U.S. Department of Energy Glossary of Energy Related Terms, 2009.http://www1.eere.energy.gov/site_administration/glossary.html (Mar. 2, 2012) (emphasis added)).

[redacted][30] Respondents cannot now hide from their initial characterization of this material and claim that it was not burned for energy recovery.

EPA's Hazardous Waste Burned in Boilers and Industrial Furnaces regulations are also instructive in determining when a hazardous waste is a fuel. 40 C.F.R. Part 266 Subpart H. The regulations provide that hazardous waste with a heating value of 5,000 BTU/lb or more is considered burned as a fuel – and not considered burned as an ingredient. 40 C.F.R. § 266.103(a)(5)(ii)(B). While no current regulation uses the 5,000 BTU/lb threshold to determine whether a secondary material satisfies the definition of solid waste, the threshold may serve as a guideline to this Court. [redacted]

Further, EPA has already determined that wastes similar to Unitene, when used in a blast furnace, constitute a fuel. First, in a letter to Ernie Willis of IWM on December 9, 2005, Margaret Guerriero of EPA Region 5's Waste, Pesticides and Toxics Division responded to a request that Ohio EPA and U.S. EPA determine whether the use of K022 as a coke supplement in a blast furnace requires it to be handled as a hazardous waste.[31] *See* CX47. Director

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[30] *See also* [redacted]

[31] It is worth noting that Ernie Willis was a broker for IWM, and IWM expended significant effort to convince regulating agencies that burning a coke supplement in a blast furnace was

Guerriero explained that

> ...even if recycling of the solid waste involves use or reuse, but it is burned for energy recovery, used to produce a fuel, or contained in fuels, it remains a solid waste. The common use of the term "fuel" is any material used to produce heat or power by burning. A blast furnace receives some of its heat energy from the combustion of the coke that is charged into the furnace, as well as the combustion of material injected in the tuyeres. Combustion of the coke provides heat needed to melt the iron-bearing material in the furnace, and any substitute for coke is an alternate heat source or fuel. Therefore, the use of K022 in the blast furnace as a substitute for coke makes it a fuel.

CX47.

Second, Director Guerriero's 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,

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outside the scope of RCRA regulation. *See* CX13 at EPA10110-10186 (letters and emails to U.S. EPA, Ohio EPA, and consulting scientists requesting a determination that a coke supplement is not a hazardous waste.) In response to each correspondence, IWM was told that such coke supplements were regulated by RCRA as a hazardous waste. *See, e.g.*, CX13 at EPA10113 (an email from David H. Wakelin, Ph.D., an ironmaking consultant, which indicates that the coke supplement would be considered a hazardous waste by regulating entities); CX13 at EPA10116 (email from Jeff Mayhugh of Ohio EPA that explains that a coke supplement would be exempt from hazardous waste regulations only if it met the requirements for comparable fuels in OAC 3745-51-38); CX13 at EPA 10117-18 (letter from Elizabeth Cotsworth of EPA's Office of Solid Waste stating that EPA considers the burning of any hazardous waste with a BTU value greater than 5,000 BTU/lb. burning for energy recovery). Respondents Scott Forster and Eric Lofquist contributed to this effort and were aware of the determinations of the regulating agencies. *See, e.g.*, CX13 at EPA 10124-10125 and CX13 at EPA10161-10166.

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.

For all of the foregoing reasons, the IFF materials contained in CIS's blended fuels were burned in the WCI Steel blast furnace for energy recovery. Therefore, as a by-product or commercial chemical product that is being recycled through burning for energy recovery, the IFF materials satisfy the regulatory definition of waste in OAC § 3745-51-02.

### (2) The IFF & JLM Materials Are Not Exempt From the Definition of "Waste" Under OAC § 3745-51-02 [40 C.F.R. § 261.2(E)]

There is no genuine issue of material fact that the JLM and IFF materials do not fall within any of the exemption from the definition of solid waste under the applicable regulation:

> "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.

OAC § 3745-51-02(E)(1)[40 C.F.R. § 261.2(e)(1)].

Neither the JLM nor IFF hazardous wastes are recycled in a manner falling within these exemption. Indeed, the same section of the regulation makes clear that materials which are recycled by burning for energy recovery are solid wastes. Specifically, OAC § 3745-51-02(E)(2) [40 C.F.R. § 261.2(e)(2)] states:

> 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 rule]: . . .
>
> (b) Materials burned for energy recovery, used to produce a fuel, or contained in fuels . . .

OAC § 3745-51-02(E)(2) [40 C.F.R. 261.2(e)(2)]. Furthermore, the preamble to the final rule explains that "all secondary materials (i.e., all spent materials, sludges, by-products, and scrap metal) are considered to be wastes when they are used in a manner constituting disposal, are burned for energy recovery or used to produce a fuel, or are accumulated speculatively." 50 Fed. Reg. 614, 619 (Jan. 4, 1985). "In these situations, not only is the spent material, sludge, scrap metal, or by-product a solid waste but the waste-derived product remains subject to RCRA jurisdiction as well." *Id.* Finally, and specifically in regard to the exemption for wastes used as an ingredient in production processes, the preamble states that the exemption does not apply

when "spent materials, by-products, sludges or scrap metal are used as ingredients in waste-derived fuels . . ." *Id.* In this case, the IFF and JLM materials were blended with used oils to create a fuel, which was sold to the WCI Steel blast furnace per the terms of a "Fuel Oil Supply Agreement." *See* CX83. A full discussion of the materials' use in a fuel is in Section V.A.3.a.1.b.iii, above. Because the IFF and JLM materials were used to produce a fuel that was subsequently burned to recover energy, those materials do not satisfy the exemptions for solid wastes, as outlined in OAC § 3745-51-02(E)(1) [40 C.F.R. § 261.2(e)(1)].

**(3) The IFF and the JLM Wastes Were "Hazardous Waste"**

There is no genuine issue of material fact that the JLM and IFF wastes were hazardous wastes. A waste is a hazardous waste if it exhibits any of the characteristics in OAC §§ 3745-51-20 to 24 [40 C.F.R. Part 261, Subpart C] (ignitability, corrosivity, reactivity, and toxicity) or if it is listed in OAC §§ 3745-51-30 to 53 [40 C.F.R. Part 261, Subpart D] (from specific or non-specific sources). As discussed above, both the JLM and IFF materials are wastes. They are also hazardous wastes. They are designated as follows:

- Unitene LE: D001
- Unitene AGR: D001, D035, F003 and F005[32]
- JLM: K022

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32 [redacted]

D001 is the code assigned to a solid waste which exhibits the characteristic of ignitibility (those wastes with a flash point of less than 140 degrees Fahrenheit). 40 C.F.R. § 261.21(b). D035 is the code assigned to solid waste - specifically Methyl Ethyl Keytone ("MEK") - which exhibits the characteristic of toxicity at concentrations of 200mg/L and above. F003 is the code assigned to a solid waste which exhibits the characteristic of toxicity and the toxic contaminants causing it to be hazardous in the case of Unitene AGR are ethyl benzene and methanol. 40 C.F.R. § 261.23(b). F003 is a hazardous waste from non-specific source and is defined as:

> The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

OAC § 3845-51-31(A) [40 C.F.R. § 261.31]. F005 is the code assigned to a solid waste which exhibits the characteristic of toxicity and the toxic contaminant causing it to be hazardous in the case of Unitene AGR is methyl ethyl ketone. 40 C.F.R. § 261.23(b). F005 is a hazardous waste from non-specific source and is defined as:

> The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

OAC § 3845-51-31(A) [40 C.F.R. § 261.31]. K022 is a hazardous waste from a specific source:

> K022: Distillation bottom tars from the production of phenol/acetone from cumene.

OAC § 3845-51-32 [40 C.F.R. § 261.32].

The record is replete with evidence of the designation of these wastes. As for the JLM waste stored and treated by the Respondents, it is designated K022 and/or distillation bottom tars from the production of phenol/acetone from cumene in the following documents: [redacted] CX19 at EPA12208 (shipping record for shipment of "RESIDUE COLUMN BOTTOMS" from JLM to CIS); [redacted][33]

As for the Unitene LE waste stored and treated by the Respondents, it is designated D001 or ignitable in the following documents: [redacted]

[33] [redacted]

[redacted]; CX29 at EPA16850 (attachment to EPA Inspection Report – MSDS for Unitene LE showing flashpoint below 140 degrees Fahrenheit) and EPA16854 (Certificate of Analysis for Unitene LE showing flashpoint of 118 degrees Fahrenheit).

Finally, as for the IFF Unitene AGR waste stored and treated by the Respondents, it is designated D001, D035, F003 and F005 in the following documents: [redacted] CX29 at EPA16857 (attachment to EPA Inspection Report –MSDS for Unitene AGR showing member of ketone family of chemicals as an ingredient). *See also* [redacted]

Finally, [redacted][34] *Id.*

[34] Like blast furnaces, cement kilns are considered "industrial furnaces" under OAC 3745-50-10(A)(56) [40 C.F.R. § 260.10], and can be used for the burning of hazardous wastes for energy recovery so long as the cement kiln has a RCRA permit and meets various regulatory

Therefore, because the JLM and IFF wastes are solid wastes, as explained above, and because they meet the listing and characteristic criteria as explained above, they are in fact hazardous wastes.

### (4) The JLM and IFF Materials Are Not Excluded From RCRA (Either the Definition of "Waste" Or the Definition of "Hazardous Waste")

There are a number of materials which are excluded from the definition of solid waste, and a number of solid wastes which are excluded from the definition of hazardous waste.[35, 36]

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requirements including emission controls for organic compounds. OAC 3745-266-100 to 3745-266-112 40 C.F.R. Part 266, Subpart H]. The blast furnace fed by the CIS Facility is not and never has been a permitted industrial furnace.

[35] Exclusions from the definition of "solid waste" include: domestic sewage and mixtures of domestic sewage; industrial wastewater discharges; irrigation return flows; radioactive waste, in-situ mining waste; pulping liquors; spent sulfuric acid, closed-loop recycling; spent wood preservatives; coke by-product wastes; splash condenser dross residue; hazardous oil-bearing secondary materials and recovered oil from petroleum refining operations; condensates from kraft mill steam strippers; comparable fuels, processed scrap metal; mineral processing spent materials petrochemical recovered oil; spent caustic solutions from petroleum refining; zinc fertilizers made from recycled hazardous secondary materials, and; recycling of cathode ray tubes. OAC 3745-04(A) [40 C.F.R. § 261.4(a)].

[36] Exclusions from the definition of "hazardous waste" include: household hazardous waste; agricultural waste; mining overburden; trivalent chromium wastes; arsenically treated wood; petroleum-contaminated media and debris from underground storage tanks; spent chlorofluorocarbon refrigerants; used oil filters; used oil distillate bottoms, and; landfill leachate

*See also* OAC § 3745-51-04(C)-(G) [40 C.F.R. §§ 261.4(c) - (g)] (listing other exclusions not relevant to this matter). The IFF and JLM wastes are not excluded under OAC § 3745-04(A) [40 C.F.R. § 261.4(a)]. It is worthwhile to note that the comparable fuel solid waste exclusion may have been applicable to the IFF and/or JLM waste, but the generators (IFF and/or JLM) did not take the necessary steps to satisfy the exclusionary requirements. OAC § 3745-04(A)(16) [40 C.F.R. § 261.4(a)(16)]. In order to qualify for the comparable fuel exclusion, certain physical and constituent specifications must be met, and conditions at such as notification, sampling and analysis, recordkeeping must be met. OAC § 3745-51-38(A) and (B) [40 C.F.R. §§ 261.38(a) and (b)]. None of these requirements were met by the generators (JLM and/or IFF) of the hazardous waste in this case.

**b) The JLM and IFF Materials Were Stored and Treated At the CIS Facility**

Once they arrived at the facility, the JLM and IFF wastes were off-loaded to one or more of the ten (10) receiving tanks at the facility. [redacted]; CX46 at EPA17145 (printout from CIS website including description of the Facility). They were then commingled and/or blended with used oil and other materials, and sequenced to a "day tank." [redacted]; CX46 at EPA17145 (printout from CIS website including description of the Facility). CX24 at EPA13130. The wastes were then fed through a pipe to a steel mill blast furnace. [redacted]; CX29

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or gas condensate derived from certain listed wastes. OAC 3745-04(B) [40 C.F.R. § 261.4(b)].

at EPA16814-16815 (EPA Inspection Report describing the Facility); CX46 at EPA17145 (printout from CIS website including description of the Facility).

The statutory definition of "Storage" is:

> when used in connection with hazardous waste, the containment of hazardous waste, either on a temporary basis or for a period of years, in such manner as not to constitute disposal of such hazardous waste.

42 U.S.C. § 6903(32). The regulatory definition of "Storage" is:

> the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.

OAC § 3745-50-10 (111) 40 C.F.R. §260.10]. At the CIS Facility, storage of hazardous waste occurred when the hazardous wastes were stored in the ten receiving tanks at the Facility.

The statutory definition of "Treatment" is:

> when used in connection with hazardous waste, means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to render such waste nonhazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume. Such term includes any activity or processing to change the physical form or chemical composition of hazardous waste so as to render it nonhazardous.

42 U.S.C. § 6903(32). The regulatory definition of "Treatment" is:

> any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to recovery energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safe to transport, store or dispose of; or amenable for recovery, amenable for storage, or reduced in volume.

OAC § 3745-50-10 (125) [40 C.F.R. §260.10].

At the CIS Facility, treatment of hazardous waste occurred when the hazardous wastes were blended with used oil prior to entering the "day tank." By blending the hazardous wastes with the used oil, CIS changed the "physical, chemical, or biological character or composition of

hazardous waste so as to recovery energy or material resources from the waste, or so as to render such waste…amenable for recovery." OAC § 3745-50-10 (125) [40 C.F.R. §260.10].

Fuel blending operations are specifically addressed at OAC § 3745-66 [40 C.F.R. Part 266, Subpart H], which provides that owners and operators of facilities that store or treat hazardous waste that is burned in boilers and industrial furnaces are subject to the applicable provisions of OAC Chapters 3745-54 to 3745-57 [40 C.F.R. Part 264] (standards of owners and operators of hazardous waste treatment, storage, and disposal facilities), OAC Chapters 3745-65 to 3745-69 [40 C.F.R. Part 265] (interim status standards for owners and operators of hazardous waste treatment, storage, and disposal facilities), and OAC Chapters 3745-40 to 3745-235 [40 C.F.R. Parts 267 and 270], and OAC § 3745-66-101(C) [40 C.F.R. § 266.101(c)](EPA administered permit programs: the Hazardous Waste Permit Program). The provision clarifies that "[t]hese standards apply to storage by the burner as well as to storage facilities operated by intermediaries (processors, blenders, distributors, etc.) between the generator and the burner." *Id.* EPA guidance further states:

> Some fuel blenders have asserted that, since their activities are considered recycling, the blending operation is exempt from permit requirements according to §261.6(c)(1). Section 261.6(a)(2), however, clearly states that hazardous wastes which are recycled materials and are burned for energy recovery "…are regulated under Subparts C through H of Part 266 of this chapter and all applicable provisions in Parts 270 and 124 of this chapter." This provision makes it clear that fuel blending is not exempt from regulatory standards or permitting.

CX95 at EPA18547.

It is clear that there is no genuine issue of material fact that the activities at the CIS facility constituted both storage and treatment of the hazardous wastes that CIS obtained from IFF and JLM.

### 4. Respondents Did Not Have A RCRA Subtitle C Permit For the Hazardous Waste Management Facility

The RCRA statute required EPA to promulgate the following:

> [EPA] shall promulgate regulations requiring each person owning or operating an existing facility or planning to construct a new facility for the treatment, storage, or disposal of hazardous waste …to have a permit issued under this section…[after the regulations take effect] the treatment, storage, or disposal of any such hazardous waste and the construction of any new facility for the treatment, storage or disposal of any such hazardous substance is prohibited except in accordance with such a permit.

42 U.S.C. § 6925(a).

EPA promulgated the required regulations and they can be found at 40 C.F.R. Part 270. Specifically, 40 C.F.R. § 270.1(c) states:

> RCRA requires a permit for the "treatment," "storage," and "disposal" of any "hazardous waste" as identified or listed in 40 C.F.R. Part 261. The terms "treatment," "storage," "disposal," and "hazardous waste" are defined in § 270.2. Owners and operators of hazardous waste management units must have permits during the active life (including the closure period) of the unit.

40 C.F.R. § 270.1(c). The Ohio regulations state:

> No person shall begin physical construction of a new hazardous waste facility without having submitted "Part A" and "Part B" of a permit application to the director and having received an effective Ohio hazardous waste facility installation and operation permit.

OAC § 3745-50-40(A)(1).

Respondents admit that they did not have a RCRA Subtitle C permit when they operated the facility. CX41 at EPA17113, para. 50. Respondents' storage and treatment of hazardous waste without a permit violated Section 3005 of RCRA, 42 U.S.C. § 6925(a) and the requirements of OAC §§ 3745-50-40 to 3745-50-66 [40 C.F.R. §§ 270.1(c) and 270.10(a) and (d), and 270.13].

### 5. Respondents Forster and Lofquist Are Directly Liable As Operators

In this case, both of the individual officers, Forster and Lofquist, were responsible for overall operation of the CIS facility. Both Forster and Lofquist managed and directed operations specifically having to do with the management of hazardous waste by CIS. Both officers made significant decisions with regard to the facility's compliance with RCRA. As such, both officers are directly liable as operators in this matter.

#### a) RCRA definition of "Operator"

As noted above, RCRA Section 3008(a)(1) provides for enforcement against "any person" who violates the RCRA regulations, 42 U.S.C. § 6928(a), and Respondents admit that they were and are "persons" as defined by OAC § 3745-50-10(A)(88) [40 C.F.R. § 260.10], and Section 1004(15) of RCRA, 42 U.S.C. § 6903(15). CX41 at EPA17103, para. 14. However, the requirements of RCRA are directed at "owners and operators." 42 U.S.C. § 6925(a). In this case, EPA has alleged that Respondents Forster and Lofquist are operators. CX40 at EPA17073, para. 14.

The implementing regulations of RCRA define "operator" as "the person responsible for the overall operation of a facility." OAC § 3745-50-10(A)(83) [40 C.F.R. § 260.10]. A number of administrative and federal district court decisions have discussed what constitutes an "operator." The federal district court cases include: *Scarlett & Assoc. v. Briarcliff Center Partners LLC*, No. 1:05-CV-01450CC, 2009 U.S. Dist. LEXIS 90483 at **27-31 (N.D. Ga. Sept. 30, 2009) (RCRA Section 7002 case wherein the Court found that case law indicates the definition of operator is the same under RCRA and the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA")); *Bd. Of County Comm. of La Plata v. Brown Group Retail, Inc., et al.*, No. 08-CV-00855-LTB, 2009 U.S. Dist. LEXIS 38771 at *9 (Dist.

Colo. April 24, 2009) (CERCLA case wherein the Court found that the definition of operator under RCRA is substantially the same as the definition under CERCLA); *City of Wichita v. Apco Oil Corp. Liquidating Trust et al.*, 306 F.Supp.2d 1040, 1054 (D.Kan. 2003)(CERCLA case wherein the Court noted that an "operator" under CERCLA "must manage, direct, or conduct operations specifically related to pollution, that is, operations having to do with leakage or disposal or hazardous waste, or decisions about compliance with environmental regulations." (quoting *United States v. Bestfoods*, 524 U.S. 51, 67 (1998)). The administrative cases include: *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) (RCRA case where Secretary/Treasurer and 10% shareholder of corporation not shown to be an operator and thus not personally liable, where the evidence failed to shows that he exercised active and pervasive control over facility operations and instead acted merely as liaison between the corporation and State regulatory officials); *In the Matter of: Zaclon, Inc., Zaclon LLC and Independence Land Development Company*, Docket No. RCRA 05-2004-0019, 2006 EPA ALJ LEXIS 19 at **17-20 (April 21, 2006)(RCRA case where the court found that complainant had made a colorable claim that two individuals were "operators" of a hazardous waste treatment, storage, or disposal facility, citing to *In the Matter of Southern Timber Products* and noting that "[o]ne or more officers as well as the corporation may be "operators" where these individuals have responsibility for the overall operation of the facility"); *In the Matter of J.V. Peters and Company, Inc. et al.* Docket No. V-W-81-R-75, 1995 EPA ALJ LEXIS 40 at *29 (July 18, 1995) (RCRA matter where the court found an individual who organized the operation liable as a "operator", where he acquired the property for the operation, was engaged in the daily running of the operation, and made the decisions as to the facility's compliance with RCRA);

and, *In the Matter of Everwood Treatment Co., Inc. and Cary W. Thigpen*, Docket No. RCR-IV-92-15-R, 1995 EPA ALJ LEXIS 109 at **89-90 (July 7, 1995)(RCRA matter where the officer who directed the placement of contaminated soil in a containment unit could liable as an "operator"). *In the Matter of Southern Timber Products* specifically considered the following factors in determining officer liability: role in the corporation; percent of stock ownership in the corporation; authority to hire, fire and control employees; degree of presence at the facility; involvement in the activity at issue; authority in making financial decisions for the facility; involvement and authority in decision making as to the facility's operation and compliance with laws and regulations at issue; authority and control over the facility; authority in making decisions as to consultants; delegation of responsibility to others; documents submitted to EPA identifying the individual as facility operator and not just corporate representative; and personal liability under a lease at the facility. 192 EPA App. LEXIS at **23-35.

Furthermore, EPA has a policy of pursuing corporate officers liable under RCRA Section 3008, 42 U.SC. §6928, due to their personal participation in the corporate action which violated RCRA. *See* Memorandum from K. Stein and B. Diamond to J. Barker and D. Guinyard (Dec. 12, 1990) regarding "Individual Liability of Corporate Offices as Operators Under RCRA" (Attachment C). In this case both Forster and Lofquist exercised active and pervasive control over facility operations, and are therefore liable as operators under RCRA.

**b) Forster was a RCRA "Operator"**

Applying the facts of this case to the individual factors listed in *In the Matter of Southern Timber Products*, Forster exercised active and pervasive control over facility operations, and is therefore liable as an operator under RCRA. *In the Matter of Southern Timber Products*, 1992 EPA App. LEXIS at **23-35.