



STATE OF CONNECTICUT

V.

Leading Edge Concepts, Inc.

CONSENT ORDER # WSWDH15001

Date Issued: February 5, 2015

- A. With the agreement of Leading Edge Concepts, Inc. ("Respondent"), the Commissioner of Energy and Environmental Protection ("the Commissioner") finds:
1. Respondent is a Connecticut corporation, which is or has been engaged in the business of electroforming for the aircraft industry at 15 Berkshire Boulevard in Bethel, Connecticut ("the site").
 2. Respondent is or has been a generator of hazardous waste at the site.
 3. Based on an inspection conducted by the Department of Energy and Environmental Protection, Bureau of Materials Management and Compliance Assurance, Waste Engineering and Enforcement Division, on April 15 and 17, 2014, Respondent:
 - a. **Failed to notify for hazardous waste activities and obtain a permanent EPA identification number prior to treating, storing, or disposing of hazardous waste as required by section 22a-449(c)-102(a)(1) of the Regulations of Connecticut State Agencies ("RCSA"), incorporating Title 40 of the Code of Federal Regulations ("40 CFR") 262.12(a).** Specifically, Respondent has been operating at the above site since 1991 and has been shipping hazardous waste off-site without first obtaining an EPA identification number. A three (3) year review of hazardous waste manifests revealed that Respondent has been operating as a small quantity generator (SQG) of hazardous waste since March of 2013 and operated as a large quantity generator (LQG) of hazardous waste in December of 2013. The company appeared to have been operating as a conditionally exempt small quantity generator (CESQG) of hazardous waste during 2011 and 2012.
 - b. **Failed to perform hazardous waste determinations on all solid waste being generated at the facility as required by section 22a-449(c)-102(a)(2)(A) and (B) of the RCSA, incorporating 40 CFR 262.11, with specified changes.** Specifically, Respondent had not performed hazardous waste determinations on spent rinse water from the dismounting table; hazardous waste liquid generated from the evaporation of spent rinse water from the dismounting table; and hazardous waste solid or spent electroforming filters, gloves and debris. For the spent rinse water from the dismounting table, Respondent needs to determine if this waste stream is a hazardous waste before being directed to the evaporator. With

respect to the hazardous waste liquid generated from the evaporation of spent rinse water from the dismantling table, the proper RCRA waste codes applicable to this waste stream need to be determined. Respondent has sometimes manifested this waste stream as "D007, D010" (chromium, selenium), sometimes as "D007" (chromium), and sometimes as "D007, D008" (chromium, lead). Further, this waste stream may also be an F006 listed hazardous waste in addition to being characteristically hazardous for certain RCRA metals since Respondent performs electroforming, a type of electroplating. Similar to the second waste stream, the proper RCRA waste codes applicable to this waste stream need to be determined. Respondent has sometimes manifested this waste stream as "D007, D010" (chromium, selenium) and sometimes as "CRO5" (non-RCRA hazardous waste).

- c. **Failed to properly prepare manifests for all shipments of hazardous waste as required by section 22a-449(c)-102(a)(1) of the RCSA, incorporating 40 CFR 262.20(a).** Specifically, manifested shipments received by Northland Environmental, Inc. on April 9, 2009 and on April 23, 2010 were found to contain lead which resulted in a manifests change on PSC Environmental Services' off-specification forms.
- d. **Failed to ensure that the satellite accumulation container remains closed except when adding or removing hazardous waste as required by section 22a-449(c)-102(c)(3) of the RCSA, incorporating 40 CFR 262.34(c)(1)(i) and 40 CFR 265.173(a).** Specifically, the satellite accumulation container which collects spent rinse water from the dismantling table is a square, open-top polypropylene tank of unknown capacity. Leading Edge must replace this tank with a container that can remain closed except when adding or removing waste.
- e. **Failed to keep containers holding hazardous waste closed during storage, except when it is necessary to add or remove waste as required by section 22a-449(c)-102(c)(3) of the RCSA, incorporating 40 CFR 262.34(d)(2) which requires compliance with 40 CFR 265.173(a).** Specifically, there were two (2), full, 55-gallon drums with open bungs in the hazardous waste container storage area at the time of the hazardous waste compliance inspection.
- f. **Failed to clearly mark all containers of hazardous waste with the date upon which each period of accumulation began as required by section 22a-449(c)-102(c)(3) of the RCSA, incorporating 40 CFR 262.34(d)(4) which requires compliance with 40 CFR 262.34(a)(2).** Specifically, at the time of the hazardous waste compliance inspection there were two (2), full, 55-gallon drums in the hazardous waste container storage area. Neither drum was marked with the date upon which accumulation began.
- g. **Failed to label or clearly mark hazardous waste storage containers with the words "Hazardous Waste" and other words that identify the contents of each container, such as the chemical name, as required by section 22a-449(c)-102(c)(3) of the RCSA, incorporating 40 CFR 262.34(d)(4) which requires compliance with 40 CFR 262.34(a)(3) with changes specified in section 22a-449(c)-102(a)(2)(J) of the RCSA.** Specifically, at the time of the hazardous waste compliance inspection there were two (2), full, 55-gallon drums in the hazardous waste storage area. Neither drum was marked with the words "Hazardous Waste" and other words that identified the contents of each container.
- h. **Failed to label or clearly mark a hazardous waste storage tank with the words "Hazardous Waste" and other words that identify the contents of the tank, such as the chemical name, as required by section 22a-449(c)-102(c)(3) of the RCSA, incorporating 40 CFR 262.34(d)(4) which requires compliance with 40 CFR 262.34(a)(3) with changes specified in section 22a-449(c)-102(a)(2)(J) of the RCSA.** Specifically, this applies to the approximately 80-gallon, open top, polypropylene tank equipped with a heat exchanger which utilizes hot water from the boilers to evaporate spent rinse water from the dismantling table ("evaporator"). The evaporator was not marked with the words "Hazardous Waste"

and other words that identified the contents of the tank at the time of the hazardous waste compliance inspection.

- i. **Failed to conduct weekly inspections of the hazardous waste container storage area as required by section 22a-449(c)-102(c)(3) of the RCSA, which requires compliance with 40 CFR 262.34(d)(2) and 265.174.** Specifically, this refers to the hazardous waste container storage area located indoors next to the evaporator. The required weekly inspections of this area must include, at a minimum, the date and time of the inspection, the full name and signature of the inspector, the observations made during the inspection, and the date and nature of any repairs or other remedial actions. Further, Addison Unangst, President of Respondent, informed Paul Hassler, Environmental Analyst of WEED, that inspections of the hazardous waste container storage area had not been conducted.
- j. **Failed to conduct inspections of safety and emergency equipment at least monthly as required by section 22a-449(c)-102(c)(4) of the RCSA, which requires compliance with section 22a-449(c)-102(b)(2) of the RCSA, incorporating 40 CFR 265.15(b)(4), with changes as specified in section 22a-449(c)-105(a)(2)(G) of the RCSA.** Specifically, this refers to the safety and emergency equipment including, but not necessarily limited to, rubber gloves, aprons, boots, a drum pump, a shovel, empty drums, fire extinguishers, and a fire alarm. Addison Unangst, President of Respondent, informed Paul Hassler, Environmental Analyst of WEED that inspections of safety and emergency equipment had not been conducted. However, an outside contractor inspects the fire extinguishers annually.
- k. **Failed to comply with general operating requirements for generators that accumulate hazardous waste in tanks as required by section 22a-449(c)-102(c)(3) of the RCSA, incorporating 40 CFR 262.34(d)(3) which requires compliance with 40 CFR 265.201(b)(3) and (4).** Specifically, this applies to the evaporator as described in paragraph A.3.h. above. The evaporator was not operated to ensure at least two (2) feet of free board, and was not equipped with a containment structure, a drainage control system, or a diversion structure with a capacity that equals or exceeds the volume of the top two (2) feet of the tank. The evaporator was also not outfitted with a waste feed cutoff system or a by-pass system to a stand-by tank.
- l. **Failed to comply with specific inspection requirements for generators that accumulate hazardous waste in tanks as required by section 22a-449(c)-102(c)(3) of the RCSA, incorporating 40 CFR 262.34(d)(3) which requires compliance with 40 CFR 265.201(c).** Specifically, this applies to the evaporator as described in paragraph A.3.h. above. The required tank inspections were not performed. Such inspections must include, at a minimum, inspection of waste feed cutoff systems, by-pass systems, and drainage systems at least once each operating day to ensure that such equipment is in good working order; data gathered from monitoring equipment (e.g., pressure and temperature gauges) at least once each operating day to ensure that the tank is being operated according to its design; the construction materials of the tank at least weekly to detect corrosion or leaking of fixtures or seams; and construction materials of, and the area immediately surrounding, discharge confinement structures at least weekly to detect erosion or obvious signs of leakage. In addition, Addison Unangst, President of Respondent, informed Paul Hassler, Environmental Analyst of WEED that the level of the evaporator was checked each morning in order to determine whether to turn the heat exchanger on or off. However, such "checks" were not documented.
- m. **Failed to develop and follow a written inspection schedule as required by section 22a-449(c)-102(b)(2) of the RCSA, incorporating 40 CFR 265.15(b).** Specifically, Respondent had not developed or followed a written inspection schedule to identify the types of problems which are to be looked for during an inspection.

- n. **Failed to record inspections in a log or summary as required by section 22a-449(c)-102(b)(2) of the RCSA, incorporating 40 CFR 265.15(d).** Specifically, Respondent did not have records documenting inspections of safety and emergency equipment, hazardous waste containers, the hazardous waste container storage area, the hazardous waste tank, monitoring equipment, security devices, operating and structural equipment.
 - o. **Failed to ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures that are relevant to their responsibilities during normal facility operations and emergencies as required by section 22a-449(c)-102(c)(3) of the RCSA, incorporating 40 CFR 262.34(d)(5)(iii).** Specifically, Respondent had not developed a training program for their employees.
 - p. **Failed to designate an emergency coordinator as required by section 22a-449(c)-102(c)(3) of the RCSA, incorporating 40 CFR 262.34(d)(5)(i).** Specifically, Respondent had not assigned an emergency coordinator and alternate emergency coordinator.
 - q. **Failed to post emergency response information next to the telephone as required by section 22a-449(c)-102(c)(3) of the RCSA, incorporating 40 CFR 262.34(d)(5)(ii).** Specifically, Respondent had not posted next to the telephone information including, but not necessarily limited to, the name and phone number of the emergency coordinator and the alternate emergency coordinator; the location of the fire extinguishers, spill control equipment, and fire alarm, if present; and the telephone number of the fire department.
 - r. **Failed to properly manage universal waste lamps as required by section 22a-449(c)-113(a)(2)(G) of the RCSA, incorporating 40 CFR 273.13(d)(1), with specified changes.** Specifically, spent mercury-containing lamps had been disposed in the trash as unregulated solid waste rather than placed in a container that is structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers must remain closed and must be capable of preventing, spillage or damage that could cause leakage.
 - s. **Failed to properly label or mark each universal waste lamp or container or package of universal waste lamps as required by 22a-449(c)-113(a)(1) of the RCSA, incorporating 40 CFR 273.14(e).** Specifically, spent mercury-containing lamps or the container holding spent mercury-containing lamps must be labeled or marked clearly with one of the following phrases: "Universal Waste – Lamp(s)", or "Waste Lamp(s)", or "Used Lamp(s)".
 - t. **Failed to properly dispose of universal waste lamps as required by section 22a-449(c)-113(a)(1) of the RCSA, incorporating 40 CFR 273.18(a).** Specifically, spent mercury-containing lamps were being disposed in the trash instead of being handled as a universal waste and recycled.
 - u. **Failed to properly train employees who handle or have responsibility for managing universal waste lamps as required by section 22a-449(c)-113(a)(1) of the RCSA, incorporating 40 CFR 273.16.** Specifically, Respondent had not provided the required universal waste-related training for its employees.
4. On July 16, 2014, DEEP issued Notice of Violation No. WSWDH14044 to Respondent requiring correction of the violations listed in paragraphs A.3.a. through A.3.u. of this consent order. For clarification, paragraph A.3.d. was not cited in the Notice of Violation. This violation was discovered as the result of a review of documentation submitted by the Respondent in response to the Notice of Violation.

5. On September 15, 2014, Respondent submitted to DEEP a compliance statement, correspondence, and supporting documentation.
 6. Based on information Respondent submitted to DEEP, dated September 15, 2014, Respondent has corrected the violations cited in paragraphs A.3.a., A.3.e., A.3.r., A.3.t., and A.3.u. of this consent order.
 7. Based on information Respondent submitted to DEEP, dated November 7, 2014, Respondent has corrected the violations cited in paragraphs A.3.h., A.3.k., and A.3.l. of this consent order.
 8. By virtue of the above, Respondent has violated RCSA sections 22a-449(c)-100 through 119, incorporating 40 CFR Parts 260 through 279.
- B. With the agreement of Respondent, the Commissioner, acting under sections 22a-6, 22a-131, and 22a-449 of the Connecticut General Statutes, orders Respondent as follows:
1. Compliance. Respondent shall correct all violations identified in paragraph A.3. above and shall maintain its compliance with all applicable provisions of Connecticut's hazardous waste management regulations, RCSA sections 22a-449(c)-100 through 119, including but not limited to those regulations applicable to generators of hazardous waste identified in paragraph A.3. above. In particular:
 - a. On or before **thirty (30) days** after issuance of this consent order, Respondent shall retain one or more qualified consultants acceptable to the Commissioner to prepare the documents and implement or oversee the actions required by this consent order and shall, by that date, notify the Commissioner in writing of the identity of such consultant(s), or shall submit documentation to the Commissioner demonstrating that qualified in-house expertise exists to prepare the documents and implement or oversee the actions required by this Consent Order and shall, by that date, notify the Commissioner in writing of the identity of such in-house expert(s). Respondent shall retain one or more qualified consultants or in-house experts, acceptable to the Commissioner until this consent order is fully complied with and within ten (10) days after retaining any consultant or in-house expert other than one originally identified under this paragraph, Respondent shall notify the Commissioner in writing of the identity of such other consultant or in-house expert. The consultant(s) retained to prepare the documents and implement or oversee the actions required to achieve compliance with this consent order shall be a qualified professional engineer licensed to practice in Connecticut or Certified Hazardous Materials Manager ("CHMM") with qualifications acceptable to the Commissioner. Respondent shall submit to the Commissioner a description of a consultant's or in-house expert's education, experience and training which is relevant to the work required by this consent order within ten (10) days after a request for such a description. Nothing in this paragraph shall prevent the Commissioner from finding a previously acceptable consultant or in-house expert unacceptable.
 - b. On or before **sixty (60) days** after issuance of this consent order, Respondent shall perform all actions which it failed to perform as specified in paragraphs A.3.b. through A.3.d., A.3.f., A.3.g., A.3.i., A.3.j., A.3.m. through A.3.q., and A.3.s. of this consent order and submit for the review and written approval of the Commissioner the details of all such corrective actions, and supporting documentation demonstrating that the violations have been corrected.
 - c. On or before **ninety (90) days** after issuance of this consent order, Respondent shall submit for the Commissioner's review and written approval a comprehensive plan which details the actions and/or operational changes it has undertaken or will undertake to ensure future compliance with the Connecticut hazardous waste management regulations including, but not limited to, those set forth in paragraph A.3. of this consent order. The plan shall address, among other things, hazardous waste

determinations, manifesting, container management, marking/labeling, emergency planning procedures, inspection procedures, record keeping, personnel training, and disposal of universal waste lamps. Within **five (5) days** after the Commissioner approves such plan, Respondent shall carry out the plan and maintain it in full effect thereafter.

- d. On or before **ninety (90) days** after the date of issuance of this consent order, Respondent shall submit a statement certifying that the approximately 80-gallon, open top, polypropylene tank equipped with a heat exchanger which utilized hot water from the boilers to evaporate spent rinse water from the dismounting table ("evaporator") and all ancillary equipment has been closed in accordance with sections 22a-449(c)-102(c) of the RCSA, incorporating 40 CFR 265.111, 40 CFR 265.113(a), (b) and (c), and 40 CFR 265.114.
 - e. Respondent shall conduct a comprehensive recycling review of the facility to evaluate compliance with Connecticut's recycling laws set forth in section 22a-241b(d) of the CGS and section 241b-2(1) of the RCSA. On or before **one hundred twenty (120) days** after the date of issuance of this consent order, Respondent shall submit for the review and written approval of the Commissioner a business recycling profile documenting the management of recyclable materials. An example profile is included as Attachment A to this consent order.
2. Full compliance. Respondent shall not be considered in full compliance with this consent order until all actions required by this consent order have been completed as approved and to the Commissioner's satisfaction.
 3. Status of Notice of Violation No. WSWDH14044. This consent order supersedes Notice of Violation No. WSWDH14044.
 4. Civil penalty. On or before **fourteen (14) days** after issuance of this consent order, Respondent shall pay a penalty of **seven thousand six hundred twenty-six dollars (\$7,626)** as the total civil penalty to be sought by the Commissioner for those, and only those, violations described in paragraph A.3. of this consent order.
 5. Payment of penalties. Payment of penalties under paragraph B.4. of this consent order shall be mailed or personally delivered to the Department of Energy and Environmental Protection, Bureau of Financial and Support Services, Accounts Receivable Office, 79 Elm Street, Hartford, CT 06106-5127, and shall be by certified or bank check payable to "Connecticut Department of Energy and Environmental Protection." The check shall state in the memo notation, "Bureau of Materials Management and Compliance Assurance, Waste Engineering and Enforcement Division civil penalty" and the consent order number identified at the top of page one of this consent order. Copies of the check and any transmittal letter shall also be sent to Ms. Julie Dutton in the Bureau of Materials Management and Compliance Assurance, Waste Engineering and Enforcement Division, at the same address.
 5. Sampling and sample analyses. All sample analyses which are required by this consent order shall be conducted by a laboratory certified by the Connecticut Department of Public Health to conduct such analyses. All sampling and sample analyses performed under this consent order shall be performed in accordance with procedures specified or approved in writing by the Commissioner, or, if no such procedures have been specified or approved, in accordance with EPA document SW-846. Unless otherwise specified by the Commissioner in writing, the value of each parameter shall be reported to the maximum level of precision and accuracy specified in the applicable protocol, and if no such level is specified, to the maximum level of precision and accuracy possible.

7. Approvals. Respondent shall use best efforts to submit to the Commissioner all documents required by this consent order in a complete and approvable form. If the Commissioner notifies Respondent that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and Respondent shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within 30 days of the Commissioner's notice of deficiencies. In approving any document or other action under this consent order, the Commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the Commissioner deems necessary to carry out the purposes of this consent order. Nothing in this paragraph shall excuse noncompliance or delay.
8. Definitions. As used in this consent order, "Commissioner" means the Commissioner or a representative of the Commissioner.
9. Dates. The date of "issuance" of this consent order is the date the consent order is deposited in the U.S. mail or personally delivered, whichever is earlier. The date of submission to the Commissioner of any document required by this consent order shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this consent order, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is deposited in the U.S. mail or is personally delivered, whichever is earlier. Except as otherwise specified in this consent order, the word "day" as used in this consent order means calendar day. Any document or action which is required by this consent order to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed by the next day which is not a Saturday, Sunday or Connecticut or federal holiday.
10. Certification of documents. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this consent order shall be signed by Respondent or, if Respondent is not an individual, by Respondent's chief executive officer or a duly authorized representative of such officer, as those terms are defined in section 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the individual(s) responsible for actually preparing such document, and Respondent or Respondent's chief executive officer and each such individual shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under §53a-157b of the Connecticut General Statutes and any other applicable law."
11. Noncompliance. This consent order is a final order of the Commissioner with respect to the matters addressed herein, and is nonappealable and immediately enforceable. Failure to comply with this consent order may subject Respondent to an injunction and penalties.
12. False statements. Any false statement in any information submitted pursuant to this consent order is punishable as a criminal offense under section 53a-157b of the Connecticut General Statutes and any other applicable law.
13. Notice of transfer; liability of Respondent. Until Respondent has fully complied with this consent order, Respondent shall notify the Commissioner in writing no later than 15 days after transferring all or any portion of the facility, the operations, the site or the business which is the subject of this consent order or after obtaining a new mailing or location address. Respondent's obligations under this consent order shall not be affected by the passage of title to any property to any other person or municipality.

14. Commissioner's powers. "Except as provided hereinabove with respect to payment of civil penalties," nothing in this consent order shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for past, present, or future violations of law. If at any time the Commissioner determines that the actions taken by Respondent pursuant to this consent order have not successfully corrected all violations, fully characterized the extent or degree of any pollution, or successfully abated or prevented pollution, the Commissioner may institute any proceeding to require Respondent to undertake further investigation or further action to prevent or abate violations or pollution.
15. Respondent's obligations under law. Nothing in this consent order shall relieve Respondent of other obligations under applicable federal, state and local law.
16. No assurance by Commissioner. No provision of this consent order and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by Respondent pursuant to this consent order will result in compliance.
17. Access to site. Any representative of the Department of Environmental Protection may enter the site without prior notice for the purposes of monitoring and enforcing the actions required or allowed by this consent order.
18. No effect on rights of other persons. This consent order neither creates nor affects any rights of persons or municipalities that are not parties to this consent order.
19. Notice to Commissioner of changes. Within **fifteen (15) days** of the date Respondent becomes aware of a change in any information submitted to the Commissioner under this consent order, or that any such information was inaccurate or misleading or that any relevant information was omitted, Respondent shall submit the correct or omitted information to the Commissioner.
20. Notification of noncompliance. In the event that Respondent becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this consent order or of any document required hereunder, Respondent shall immediately notify by telephone the individual identified in the next paragraph and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. Within five (5) days of the initial notice, Respondent shall submit in writing the date, time, and duration of the noncompliance and the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and Respondent shall comply with any dates which may be approved in writing by the Commissioner. Notification by Respondent shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing.
21. Submission of documents. Any document required to be submitted to the Commissioner under this consent order shall, unless otherwise specified in this consent order or in writing by the Commissioner, be directed to:

Ms. Michele DiNoia
Department of Energy and Environmental Protection
Bureau of Materials Management and Compliance Assurance
Waste Engineering and Enforcement Division
79 Elm Street
Hartford, Connecticut 06106-5127

Respondent consents to the issuance of this consent order without further notice. "The undersigned certifies that he/she is fully authorized to enter into this consent order and to legally bind the Respondent to the terms and conditions of the consent order."

Leading Edge Concepts, Inc.

BY: Addison Unangst
(Signature of the individual with authority to bind Respondent to terms of consent order)

Addison Unangst
Name (typed)

President
Title

Jan. 9, 2014
Date

Entered as a final order of the Commissioner of the Department of Environmental Protection.

Mackey McCleary
Deputy Commissioner

2/4/15
Date

Consent Order No. COWSWDH 15001

Attachment A – Example Business Recycling Profile