ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:

TIMEX CORPORATION
2215 CRISP DRIVE
LITTLE ROCK, ARKANSAS 72203
EPA ID No. ARD006349724
AFIN 60-00120

LIS 04-206-01

AMENDMENT TO CONSENT ADMINISTRATIVE ORDER LIS 04-206

This First Amendment to Consent Administrative Order (hereinafter "CAO") LIS 04-206 is issued pursuant to the authority of the Arkansas Hazardous Waste Management Act, Ark. Code Ann. § 8-7-201 et seq., the Arkansas Remedial Action Trust Fund Act, Ark. Code Ann. § 8-7-501 et seq., the Arkansas Pollution Control and Ecology Commission (hereinafter "APC&EC") Regulation 23, and APC&EC Regulation 8. The issues herein, as they pertain to the property previously operated by Timex Corporation (hereinafter "Timex") at 2215 Crisp Drive, Little Rock, Pulaski County, Arkansas, having been settled by the agreement of Timex and the Arkansas Department of Environmental Quality - Hazardous Waste Division (hereinafter "ADEQ"), it is hereby agreed and stipulated by all parties that the First Amendment be entered herein.

- CAO LIS 04-206 stated, "Timex and ADEQ shall, if necessary, amend this CAO to implement the remedy proposed by Timex and approved by ADEQ." Paragraph 4, Order and Agreement, CAO LIS 04-206.
- 2. The purpose of the First Amendment is to implement the remedial action(s) as described in the remedial action decision document (RADD) incorporated as Attachment A and to establish the goals and guidelines for the remedial action.

- 4. With the exception of paragraphs 4 and 9 of the Order and Agreement of CAO LIS 04-206, the language of that CAO is incorporated verbatim into the First Amendment.
- 5. All provisions of CAO LIS 04-206 not expressly modified herein remain in full force and effect.

WORK TO BE PERFORMED

6. While Timex does not admit to any matter, factual or legal, by entering into this CAO, Timex agrees to undertake the following actions:

A. Institutional controls:

i. Timex will obtain an ordinance from the City of Little Rock, or deed restrictions, or both limiting use of the impacted property(ies) south of 12th Street to industrial use ("Industrial Use Institutional Controls"). For purposes of the Industrial Use Institutional Controls, the impacted property(ies) south of 12th Street are those that lie within the area of the shallow groundwater TCE plume emanating from 2215 Crisp Drive. The use restrictions will include the same uses as the current zoning, which is I-2 (light industrial district) as defined in Section 36-320 of the Little Rock Code of Ordinances (attached), with the following exceptions: day nursery or day care center (see 36-320(c)(1)(w)); adult day care center (see 36-320(c)(1)(x)); any eating establishment (see 36-320(c)(1)(y)-(z)); business school (see 36-320(c)(1)(ddd)); commercial, trade or craft school (see 36-320(c)(1)(eee)); bus station and terminal (see 36-320(c)(2)(b)); hotel or motel (see 36-320(c)(2)(dd)); or drive-in theater (see 36-320(c)(2)(j)) that also includes child care or play facilities. All necessary deed notices will be filed for the affected properties within one hundred twenty (120) days from the

effective date of the First Amendment. File-marked copies of the notices will be submitted to ADEQ within thirty (30) days of the filing.

ii. Timex will obtain an ordinance from the City of Little Rock, or deed restrictions, or both on individual parcels restricting development of groundwater to prevent potential human exposure to contaminants in groundwater ("Groundwater Use Institutional Controls"). For purposes of the Groundwater Use Institutional Controls, the individual parcels to be covered are those that lie within the area of the deep and shallow groundwater TCE plumes emanating from 2215 Crisp Drive. Timex will provide quarterly status updates to ADEQ regarding Timex's efforts to obtain the required institutional controls. If such institutional controls cannot be put into place as described, written notification must be submitted to ADEQ stating the needed institutional controls are not achievable and that remedial alternatives will be reevaluated. The revised remedial alternative must be submitted for review and approval by ADEQ forty-five (45) days following notification that the necessary institutional controls are not achievable.

B. Remediation:

- i. Timex will submit a detailed schedule of remedial activities to include submittal of a Treatment Technology Pilot Test Work Plan, Remedial Action Work Plan and a Groundwater Monitoring Plan, each to include a schedule for implementation. This schedule will be submitted to ADEQ for review and approval within sixty (60) days of the effective date of the First Amendment.
- ii. An access agreement will be put into place to allow Timex to implement the remedy. A signed copy of this agreement will be submitted to ADEQ within thirty (30) days of the effective date of the First Amendment.

- iii. The Remedial Action Work Plan shall provide for active soil remediation consisting of excavation and off-site disposal of unsaturated soils exceeding 0.78 mg/kg of TCE. The excavation will be backfilled with imported clean fill. If the institutional controls set forth in Paragraph 6.A.i are unattainable, Timex must develop and propose an additional remedial strategy, subject to ADEQ approval.
- iv. The Remedial Action Work Plan shall provide for in situ chemical oxidation ("ISCO") via injection of an appropriate oxidant into the shallow groundwater. Active treatment using ISCO will be performed on the shallow aquifer to treat groundwater contamination exceeding 1.96 mg/L TCE. Following active treatment, Timex will transition to monitored natural attenuation pursuant to Paragraph 6.C. for both the shallow and deep groundwater. If the institutional controls set forth in Paragraph 6.A.ii are unattainable, Timex must reevaluate the remedial approach for groundwater and propose alternate remediation approaches for the off-site groundwater contaminant plume beneath properties without groundwater use restrictions to achieve the remedial action levels beneath such properties. Consistent with Paragraph 6.A.ii, the revised remedial action alternative must be submitted to ADEQ for review and approval.
- v. For deep groundwater, the Remedial Action Work Plan shall provide solely for monitored natural attenuation following the completion of active treatment in the shallow groundwater. The Groundwater Monitoring Plan, to be approved by ADEQ, will provide details for well selection, parameters, and sampling frequency for monitored natural attenuation.
- vi. Nothing herein shall prevent Timex from proposing any changes to the work to be performed under Paragraph 6 at any time. Any such proposed changes are subject to ADEQ review and approval, such approval not to be unreasonably withheld.

vii. The goal of the remedial action is to attain the Remedial Action Levels in Tables 1 and 2 following active treatment and monitored natural attenuation.

Table 1: Remedial Action Levels for On-Site Soils

Chemical	Surface Soil Remedial Action Level (mg/kg)	Subsurface Soil Remedial Action Level (mg/kg)	Subsurface Soil Remedial Action Level if Applicable Institutional Controls Are Not Put Into Place (mg/kg)
1,1 -dichloroethane (1,1-DCA)	NA	0.0068	0.0068
1,1 -dichloroethene (1,1-DCE)	NA	0.025	0.025
cis-1,2-dichloroethene (c-DCE)	NA	0.21	0.21
1,1,1-trichloroethane (1,1,1-TCA)	NA	0.70	0.70
Trichloroethylene (TCE) ¹	6.4	0.78	0.018

Table 2: Remedial Action Levels for Groundwater

Chemical	Remedial Action Level (μg/L)	Remedial Action Level (µg/L) if Applicable Institutional Controls Are Not Put Into Place
1,1,1-trichloroethane (1,1,1-TCA)	200	200
1,1,2-trichloroethane (1,1,2-TCA)	5.0	5.0
1,1-dichloroethane (1,1-DCA)	2.4	2.4
1,2-dichloroethane (1,2-DCA)	5.0	5.0
1,1 -dichloroethene (1,1-DCE)	7.0	7.0
cis-1,2-dichloroethene (c-DCE)	70	70
1,4-Dioxane	0.67	0.67
Freon 113	53,000	53,000
Tetrachloroethylene (PCE)	5.0	5.0
Trichloroethylene (TCE) ²	1,960 (on-Site)/5.0	5.0

¹ The only active remediation to be conducted for soil is excavation as specified in Paragraph 6.B.iii relating to soil impacted with TCE above the specified thresholds in that paragraph.

	(off-Site)	
Vinyl chloride	2.0	2.0
Manganese	50	50

C. <u>Monitoring</u>: Following active treatment, if groundwater monitoring results indicate the remedial actions taken have been effective (*i.e.*, concentrations within the plume are stable or declining) after five (5) years of monitoring, the Groundwater Monitoring Plan shall provide for changes in sampling locations, constituents, and frequency of monitoring activities. If, however, remedial actions have not been effective after five (5) years of monitoring (*i.e.*, concentrations within the plume are increasing), additional remedial actions will be required. A plan for the additional evaluation and remedial activities will be submitted for review and approval forty-five (45) days following notification from ADEQ that the current remedy is not effective.

LANDOWNER NOTIFICATIONS

- 7. Timex will send a letter of Notification of Contamination to potentially impacted landowners by registered mail within thirty (30) days of the effective date of this First Amendment. Timex also will provide direct notice to impacted landowners and tenants describing the extent, chemical properties, and potential risks of exposure to persons known to work or reside within defined areas known to be contaminated and describing source control measures or remedies to be implemented.
- 8. Timex will submit a community relations plan to ADEQ within sixty (60) days of the effective date of this First Amendment that includes a mechanism to keep impacted landowners and tenants informed throughout the duration of the remediation and a schedule to submit copies

² The only active treatment to be conducted for groundwater is the treatment of shallow groundwater with ISCO as specified in Paragraph 6.B.iv. This active treatment will be followed by monitored natural attenuation for all specified contaminants in both the shallow and deep groundwater as described in Paragraph 6.C.

of letters and mail receipts to ADEQ within the remedial timeframe to demonstrate completion of the tasks in Paragraph 7.

GENERAL PROVISIONS

9. Timex hereby designates a Project Manager who shall be responsible for overseeing the implementation of all site investigation, remediation and closure activities subject to the requirements of CAO LIS 04-206 and the First Amendment. The Project Manager shall communicate with ADEQ on all technical issues which arise under CAO LIS 04-206 and the First Amendment and shall be empowered to agree on minor modifications in the implementation of any of the investigation or remediation tasks subject to the requirements of CAO LIS 04-206 and the First Amendment when such modifications are deemed by ADEQ to further the purpose of CAO LIS 04-026 and the First Amendment. Timex may change its Project Manager at any time by providing written notice of such change to the ADEQ. The initial Project Managers shall be:

For Timex:

Jane Spellman FTN Associates Ltd. 124 W. Sunbridge Drive, Suite 3 Fayetteville, AR 72703 (479) 571-3334

For ADEQ:

Hazardous Waste Division Chief Arkansas Department of Environmental Quality 5301 North Shore Drive North Little Rock, AR 72118 (501) 682-0831

10. Timex agrees to provide financial assurance for the total estimated cost of the corrective action for a 30-year period utilizing the current cost estimates. This estimated cost will include

the remedial actions presented in Paragraph 6. Within sixty (60) days of the effective date of the First Amendment, a financial assurance mechanism will be in place which adheres to APC&EC Regulation No. 23, § 265.143. The cost estimate and financial assurance mechanism will be updated annually subject to approval of ADEQ.

- 11. CAO 04-206, as amended, shall terminate following the completion of all remedial activities outlined in the RADD.
- 12. This Amendment shall be effective upon signature by both Timex and ADEQ. Unless otherwise specified in this Amendment, all times for performance of ordered activities shall be calculated from this effective date.
- 13. It is the intent of the parties that the CAO, by incorporating the RADD, sets forth the entirety of Timex's obligations with regard to the remedial activities to be undertaken regarding the Site.
- (a) In consideration of the actions that will be performed by Timex under this CAO, ADEQ covenants not to sue or to take administrative action against Timex pursuant to the Arkansas Hazardous Waste Management Act, the Arkansas Remedial Action Trust Fund Act, or APC&CE Regulations 8 and 23 for any remedial work or response costs related to the Site. These covenants are conditioned upon the satisfactory performance by Timex of its obligations under this CAO.
- (b) Specific Reservation of Rights. ADEQ reserves, and this CAO is without prejudice to, ADEQ's right to seek to compel Timex to undertake additional response actions if, prior to completion of the remedial action contemplated by the CAO, conditions at the Site, previously unknown to ADEQ are discovered, or information, previously unknown to ADEQ, is received in whole or in part, and ADEQ determines that these previously unknown conditions or information

together with any other relevant information indicates that the remedial action is no longer protective of human health and the environment.

- (c) General Reservations of Rights. ADEQ reserves and this CAO is without prejudice to, all rights against Timex with respect to all matters not expressly included within ADEQ's covenants. Notwithstanding any other provision of this CAO, ADEQ reserves all rights against Timex with respect to:
 - a. liability for failure by Timex to meet a requirement of this CAO;
 - b. liability arising from the past, present, or future disposal, release, or threat of release of hazardous material or hazardous waste not associated with the Site;
 - c. liability based on Timex's transportation, treatment, storage, or disposal, or arrangement for transportation, treatment, storage, or disposal of hazardous materials or hazardous waste at or in connection with the Site, other than as provided in the CAO or otherwise ordered by ADEQ, after signature of this CAO by Timex;
 - d. liability for violations of federal or state law that occur during or after implementation of the actions outlined in the CAO.
- (d) Subject to the preceding subparagraphs of Paragraph 13, nothing in this CAO shall be deemed to limit any authority of ADEQ (a) to take all appropriate action to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of hazardous materials or hazardous wastes on, at, or from the Site, or (b) to direct or order such action, or seek an order from a court of law, to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of hazardous materials or hazardous wastes on, at, or from the Site.

14. By virtue of the signature appearing below, the individual represents that he or she is an Officer of Timex, being duly authorized to execute and bind Timex to the terms contained herein as attested by the secretary of said entity. Execution of the First Amendment to CAO LIS 04-206 by an individual other than an Officer of Timex shall be accompanied by a resolution granting signature authority to said individual as duly ratified by the governing body of the entity.

so ordered this 27th DAY OF February, 2014.

Leura Mark

TERESA MARKS DIRECTOR

APPROVED AS TO FORM AND CONTENT:

TIMEX GROUP U, \$ A., INC.

BY: Signature

Print or Type Name __David T. Payne

Title VP-Assistant General Counsel

Date February 21, 2014