UTAH WATER QUALITY BOARD

IN THE MATTER OF	:	Docket Number GW 90-01-A
THE ENSIGN-BICKFORD COMPANY	:	**ADDENDUM TO STIPULATION AND CONSENT ORDER**

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The **Utah Water Quality Board** (hereinafter "the **BOARD**") issued the Stipulation and Consent Order (hereinafter "**CONSENT ORDER**") under the *Utah Water Quality Act* (hereinafter "the ACT") including sections 19-5-104, 19-5-111 and 19-5-115, *Utah Code Annotated* (UCA), and in accordance with the *Utah Administrative Procedures Act*, UCA 63-46b-1, *et seq.*, and issues this Addendum to the Stipulation and Consent Order (hereinafter "**Addendum**").

STIPULATION

1. The parties agree the **BOARD** has jurisdiction over this matter. The Executive Secretary of the **BOARD** (hereafter **EXECUTIVE SECRETARY**) shall administer the **CONSENT ORDER**.

2. **The Ensign-Bickford Company (EBCo)** owns and operates the facility south of Mapleton, Utah formerly owned and operated by the **Trojan Corporation (Trojan)**.

3. The requirements of the **CONSENT ORDER** entered into between the **Utah Water Pollution Control Committee** and **Trojan** on August 2, 1991 shall remain in effect except as modified by this **Addendum**.

4. In conformance with the **CONSENT ORDER**, **EBCo** has undertaken various investigations and studies to evaluate the magnitude and extent of ground water contamination and has submitted a Corrective Action Plan (CAP) dated May 31, 2002 that defines the basis for corrective action and cleanup of the ground water.

5. As provided by Utah Administrative Code, UACR 317-6-6.15.E the **EXECUTIVE SECRETARY** hereby approves the CAP in accordance with the terms of this **Addendum**. This approval is based primarily on information provided by EBCo. If future information indicates that the Corrective Action is inadequate additional measures may be required. EBCo retains all administrative and judicial rights to appeal or otherwise contest such required measures and the basis for determining the Corrective Action to be inadequate.

ORDER

EBCo IS HEREBY ORDERED (unless otherwise authorized by the Executive Secretary) to implement the approved CAP including but not limited to the following:

1. **EBCo** shall operate, as required, and maintain all extraction wells and infrastructure, including but not limited to the Mapleton #1 Well, the Orton Well, and recovery wells R1, R2, and R3 for the duration of this Corrective Action process. EBCo shall optimize the effectiveness of the overall cleanup efforts to maximize and expedite contaminant removal from the aquifer. It is acknowledged that routine and emergency shutdowns of these wells occur and include Granular Activated Carbon (GAC) change out, pre-filter change out, and aquifer testing as detailed in Table 12-4 of the CAP [See attached copy in Appendix A]. Maximum pumping rate for the system is not to exceed 4100 acre-feet per year, or approximately 2500 gal/min. Operational pump rates per well may be variable depending upon water levels and the need to stress the aquifer locally to adequately address overall performance of the corrective action process. EBCo shall comply with the notification procedure for shutdowns which is set forth in Table 12-4 of the CAP [See attached copy, Appendix A]. In addition, EBCo shall provide notice to the Executive Secretary within 24 hours of any short-term cessation of extraction well operation that lasts longer than 7 days and shall include a report of actions taken on the shutdown in its annual report.

2. EBCo shall maintain the GAC filtration for the wells served by the Mapleton #1, Orton and Spanish Fork GAC systems as outlined in the CAP. **EBCo** shall as part of its annual report (see section 12.12 of CAP copy attached in Appendix A] submit a report by April 30 of each year outlining the performance of the GAC for the previous calendar year and provide a schedule of expected change-outs.

3. **EBCo** shall provide a quarterly report of the analysis of select private, municipal and monitoring wells as per the approved sampling and analysis plan [see section 12.6 of the CAP, copy attached in Appendix A] or as subsequently modified and approved, as well as other monitoring activities that have occurred since the last quarterly report. The reporting dates for these reports are May 31, August 31, November 30, and February 28 for the previous calendar quarter. No wells shall be removed from the approved plan or other modifications made from the approved plan unless agreed upon by the **EXECUTIVE SECRETARY**. Additional monitoring wells may be required and shall be installed within 120 days of receipt of notice from the **EXECUTIVE SECRETARY**. Other changes or modifications to the monitoring activities may be made if agreed upon by the **EXECUTIVE SECRETARY.** EBCo retains all administrative and judicial rights to appeal or otherwise contest such notice or the action required by same.

4. **EBCo**, in conjunction with Mapleton City, shall continue to provide Institutional Controls as described in Section 11.6 of the CAP [See copy in Appendix A]. These controls include but are not limited to: the continued owner notification of wells sampled and sample results, the requirement of the City of Mapleton to mandate culinary water hooks ups; notification of new well owners of potential contamination; and yearly

assessment of the Institutional Controls being implemented. As part of the Annual Report, EBCo shall submit to the **EXECUTIVE SECRETARY** by April 30 of each year a description of the previous year's activities and any proposed changes to these institutional controls. No changes shall be made to the Institutional Controls unless agreed upon by the **EXECUTIVE SECRETARY**. The **EXECUTIVE SECRETARY** shall work with EBCo to resolve any issues of access and to obtain the cooperation of persons and entities for actions necessary to carry out the provisions of the **CONSENT ORDER** and this **Addendum.**

5. **EBCo** shall complete an assessment of the CAP annually to include but not limited to the elements described in Section 11.0 of the CAP [See attached copy in Appendix A]. All analytical data and water levels shall be taken into account when proposing changes to the CAP. Any proposed changes to the operation of the corrective action plan shall be included in this assessment and are subject to Executive Secretary approval. The assessment report shall, consistent with the approved CAP be submitted to the **EXECUTIVE SECRETARY** by April 30 of each year. **EBCo** shall respond to any written comments concerning the annual assessment within 60 days of receipt of notice from the **EXECUTIVE SECRETARY**.

6. On-site controls for the plant site shall be regulated separately from this **CONSENT ORDER** by the Department of Environmental Quality.

7. The duration of this CAP shall be determined by when permanent clean up of the ground water has been achieved. The cleanup levels for this action are listed in Table I. The criteria that shall be used to assess whether or not clean up has been achieved shall be those cleanup levels in effect at the time system shutdown is proposed. If future monitoring data indicates additional contaminants of concern this table may be modified by the Executive Secretary. Other appropriate and relevant factors, including but not limited to potential aquifer rebound affects, shall be included in the overall cleanup effectiveness assessment. Modification or final shutdown of the extraction and treatment system shall not occur until agreed upon by the **EXECUTIVE SECRETARY**.

TABLE 1

Compound	Corrective Action Cleanup Level
RDX*	2 ug/l
HMX	400 ug/l
PETN	52 ug/l
EGDN	52 ug/l
DEGDN	52 ug/l
TEGDN	52 ug/l
TMETN	52 ug/l
BTTN	52 ug/l
Total Nitrate Esters	52 ug/l
Nitrate-Nitrogen	10 mg/l
Dissolved Lead	0.015 mg/l

* The figure of 2 ug/l for RDX is the present cleanup level subject to modification by decision of the Executive Secretary or the Utah Water Quality Board taking into consideration all relevant factors.

8. To provide financial assurance that **EBCo** will comply with the provisions of the CAP, **EBCo** shall, within fifteen days following the date of this **Addendum**, provide to the **EXECUTIVE SECRETARY** an irrevocable letter of credit in the amount of nine million three hundred and seventy-five thousand dollars ($9,375,000) with a standby trust with the State as beneficiary in a form acceptable to the **EXECUTIVE SECRETARY.** The amount of the costs of completing the work under the CAP is estimated on the date of this **Addendum** to be $9,375,000. The amount of the cost to complete the work under the CAP shall be adjusted annually to include an increase by the average annual Public Treasurers Investment Fund Rate from July 1 to June 30 of the preceding year, compounded annually, and a decrease for costs paid for operation and maintenance of the systems required by the CAP for the previous year. Adjustment of the amount of the cost to comply with the provisions of the CAP may also be made based on changes in the assumptions used to calculate projected costs. Adjustment of the amount of the letter of credit will be made on or about January 1 of each year, with the first adjustment to be made January 1, 2008. **EBCo** shall contact the **EXECUTIVE SECRETARY** each year to provide the costs for the preceding year, to obtain from the Trustee the rate of interest to be applied, and to discuss any other adjustments to the amount of the costs of completing the work under the CAP. The trust fund shall be established for the time period for implementation of the CAP.

9. **EBCo** shall pay stipulated penalties to the Division of Water Quality (**DWQ**) in the event that any of the reporting deadlines established by this **Addendum** are missed. Amounts payable under this provision shall be $250 per calendar day. Payment of penalties shall be made within 30 days of notice from the **EXECUTIVE SECRETARY** that a deadline has been exceeded. **EBCo** shall also pay stipulated penalties of $500 per calendar day to **DWQ** if **EBCo** fails to maintain the extraction and treatment facilities or if **EBCo** fails to maintain Institutional Controls required of EBCo as detailed in the CAP.

10. **EBCo** shall continue to reimburse **DWQ** for reasonable costs of review and oversight of the CAP. The current fee schedule establishes $70.00 per hour for review and oversight costs and is subject to change.

11. In the event **EBCo** is not able to meet the dates required by this **Addendum** for reasons beyond **EBCo's** control, **EBCo** shall submit evidence of such to the **EXECUTIVE SECRETARY** and upon approval of the **EXECUTIVE SECRETARY** the dates shall be extended for a reasonable time.

12. The **EXECUTIVE SECRETARY** may terminate the **CONSENT ORDER, including this Addendum,** for any reason and without cause by giving **EBCo** written notice. The termination is effective thirty (30) calendar days after the date of receipt of written notice. This **Addendum** shall become effective upon execution by **EBCo** and the **EXECUTIVE SECRETARY**.

13. Any disputes related to any of the provisions of this **Addendum** are subject to the dispute resolution provision specified in item 9, pages 6-7 of the Stipulation and Consent Order.

Dated this 30 day of January, 2007.

The Ensign-Bickford Company

By: _____
Michael T. Long, Esq.
Managing Director

Utah Water Quality Board

By: _____
Walter L. Baker
Executive Secretary

APPENDIX A

Sections 11 and 12 of CAP