

U.S. DEPARTMENT OF ENERGY  
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
OFFICE OF QUALITY ASSURANCE

SUPPLIER AUDIT REPORT

OF

ENERGY & PROCESS CORPORATION  
TUCKER, GEORGIA

AND

COMMERCIAL PANTEX SIKA, INC., AND  
IQL CORPORATION  
LOUISVILLE, KENTUCKY

REPORT NUMBER OQA-SA-96-015  
MAY 20 THROUGH 23, 1996

Prepared by:

*WW Hudson for*

Date:

*6/10/96*

Daniel A. Klimas  
Audit Team Leader  
Yucca Mountain Quality  
Assurance Division

Approved by:

*RG Spence For*

Date:

*6/12/96*

Donald G. Horton  
Director  
Office of Quality Assurance

Enclosure

## **1.0 EXECUTIVE SUMMARY**

The results of the supplier audit of Energy & Process Corporation (E&PC), Commercial Pantex Sika, Inc. (CPS), and IQL Corporation (IQL) revealed satisfactory implementation of the Quality Assurance (QA) requirements for the Office of Civilian Radioactive Waste Management (OCRWM) activities. Implementing procedures and processes were in place for the scope of work and implementation was considered to be effective in producing the desired results. E&PC currently holds an American Society of Mechanical Engineers (ASME) Quality System Certificate number QSC-332, expiration April 28, 1999, as a material organization manufacturing and supplying various shapes, material, and products, including the qualification of suppliers, testing, and upgrading of material. E&PC provides the steel sets and channel lagging to accommodate ground support during tunneling operations at the Yucca Mountain Site.

There were two conditions not in compliance to the QA program corrected during the audit and detailed in Section 5.0.

## **2.0 SCOPE**

The supplier audit was conducted to evaluate the adequacy, implementation, and effectiveness of E&PC's quality program within E&PC as well as two of their subcontractors working to this program: CPS and IQL. This was accomplished by determining if E&PC's program meets the quality and technical requirements specified in the Kiewit/Parsons Brinckerhoff (Kiewit/PB) procurement document number 79788, the E&PC QA Manual, Revision 1, dated February 28, 1996, and the OCRWM Quality Assurance Requirements and Description (QARD) for the specific scope of work. The QA program elements determined to be applicable are: Organization; QA Program; Procurement Document Control; Implementing Documents; Document Control; Control of Purchased Items and Services; Identification and Control of Items; Control of Special Processes; Inspection; Test Control; Control of Measuring and Test Equipment; Handling, Storage, and Shipping; Inspection, Test and Operating Status; Nonconformances; Corrective Action; QA Records; and Audits.

## **3.0 AUDIT TEAM AND OBSERVERS**

Daniel A. Klimas, Audit Team Leader, Office of Quality Assurance (OQA), Yucca Mountain Quality Assurance Division (YMQAD)  
Stephen D. Harris, Audit Team Member, OQA, YMQAD

#### **4.0 PERSONNEL CONTACTED DURING THE AUDIT**

Charles E. Thornton, Manager, Quality Assurance, E&PC  
Chris Smith, Sales Engineer, E&PC  
Mark T. Capallo, President and General Manager, E&PC  
Doug Walker, Operations Manager, E&PC  
Chuck Wolfe, Test Laboratory Technician, E&PC  
John Baum, Jr., Quality Supervisor, CPS  
Kenny Thornton, Quality Control Inspector, CPS  
Gary Johnson, Welding Inspector, CPS  
Harvey Brandon, Operations and Quality Manager, CPS  
Rush Fullerton, Office Manager, IQL  
Dean Droddy, Welding Inspector, IQL

#### **5.0 SUMMARY OF SURVEY RESULTS**

The E&PC QA Manual, Revision 1, dated February 28, 1996, addresses the applicable elements of the Kiewit/PB purchase agreement number 79788 and the applicable elements of the OCRWM QARD for the intended scope of work. CPS and IQL are subcontractors of E&PC and are working under the E&PC QA Manual and either E&PC procedures or CPS procedures written for their specific scope of work. Procedures or processes described within the manual were in place and implementation was considered to be effective.

Two concerns were discovered and corrected during the audit. One was at E&PC related to records. Records are retained in files but they do not have a dual location system for all records or do not retain records in 1-hour fire rated files. The QA Manager had 1 hour fire rated file cabinets in his office but was not using them for this purpose. He collected the necessary Yucca Mountain Project file copies not sent to Kiewit/PB and placed them in these cabinets prior to the end of the audit. The other was discovered at the IQL and CPS facilities. CPS procedure SPP-002, Revision 0, is written for conformance to American Welding Society (AWS) D1.1, Edition 1992. Some IQL welders were qualified to AWS D1.1, Edition 1994, and some to Edition 1992. The records are retained by the Quality Supervisor at CPS who is also an AWS welding inspector. An evaluation was performed and a memo to file was created that stated no requirement changes from AWS D1.1-1992 to D1.1-1994 would affect the certification of welders to either edition. This memo was attached to the certification documents for those welders qualified to the 1992 edition and included with SPP-002.

The details of the audit, along with the objective evidence reviewed and items corrected during the audit, are contained within the audit checklist which is available from the OQA's quality records files.

#### **6.0 DEFICIENCIES CORRECTED DURING THE AUDIT/RECOMMENDATIONS**

There were no deficiencies initiated or recommendations provided as a result of the audit.

##### **Deficiencies Corrected During the Audit:**

1. Records which were not retained in either a dual storage system or a 1-hour fire rated file cabinet were copied and placed in a 1 hour file cabinet.
2. Some IQL welders were qualified to meet AWS D1.1, Edition 1992, and some to Edition 1994. CPS procedure SPP-002, Revision 2, is written to comply with AWS D1.1, Edition 1992. An evaluation was performed and a memo to file created that stated no requirement changes from AWS D1.1-1992 to D1.1-1994 would affect the certification of welders to either edition. This memo was attached to the certification documents for those welders qualified to the 1992 edition and included with SPP-002.