



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
ATOMIC SAFETY AND LICENSING BOARD

In the Matter of  
CROW BUTTE RESOURCES, INC.  
(Marsland Expansion Area)

Docket No. 40-8943-MLA-2  
ASLBP No. 13-926-01-MLA-BD01

Hearing Exhibit

Exhibit Number:

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NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of: )  
) Docket No. 40-8943-MLA-2  
CROW BUTTE RESOURCES, INC. )  
) ASLBP No. 08-867-02-OLA-BD01  
(Marsland Expansion Area) )

AFFIDAVIT OF DOUG PAVLICK

I, Douglas J. Pavlick, do hereby state as follows:

1. I am employed by Cameco Resources as the General Manager of U.S. Operations. In this position, I oversee uranium mining and U3O8 production operations and direct site activities. A statement of my professional qualifications is attached.
2. I am responsible for the paragraphs in the direct testimony on Contention 2 that are marked with my initials.
3. I attest to the accuracy of those statements, support them as my own, and endorse their introduction into the record of this proceeding.
4. I hereby certify under penalty of perjury that the forgoing is true and complete to the best of my knowledge, information, and belief.

Executed in accord with 10 C.F.R. § 2.304(d),

signed electronically by Douglas J. Pavlick  
Douglas J. Pavlick  
PO Box 1210  
Glenrock, WY 82637 USA  
[Doug\\_Pavlick@cameco.com](mailto:Doug_Pavlick@cameco.com)

Dated at Glenrock, Wyoming  
this 16th day of August 2018

## **Douglas J. Pavlick**

### **Summary of Qualifications**

Twenty years' experience processing uranium and sodium carbonate ore in the western U.S. Seven years technical sales experience in design and implementation of water and wastewater treatment processes at several large industrial facilities for a specialty chemical manufacturer. Two years additional engineering experience as a hydrogeologist involved with hazardous waste site remediation, field investigation, and data interpretation.

### **Professional Experience**

#### **CAMECO RESOURCES, Casper, WY (2008 – Present)**

##### **General Manager U.S. Operations /General Manager Crow Butte / Operations Manager Crow Butte**

General Manager For Cameco's U.S. ISR Mining operations responsible for oversight of three active uranium mining and U3O8 production operations with a staff of ~190 employees and ~50 contractors. Direct site activities for safety, environmental protection, regulatory compliance, and production. Oversight of restoration activities to return mine units to original class of use water quality as final step in regulatory signoff process. Lead expansion site permitting and licensing in Wyoming and Nebraska. Coordinate mining activities with NRC and NDEQ regulatory agencies for timely issuance of operating permits for existing and expansion sites.

Operations Manager responsible for processing plant production of uranium oxide from in-situ recovery (ISR) mining facility. Installation of wastewater treatment plant to recover uranium from evaporative waste ponds and resulting effluent suitable for deep well disposal. Startup and operation of low grade ore recovery circuit, increasing mine production output by 15%.

#### **OCI CHEMICAL CORPORATION, Green River, WY (2001 – 2007)**

##### **Surface Operations Manager / Project Manager / Technical Manager**

Surface Operations Manager (current position) responsible for Engineering, Environmental, Shipping, Lab and Soda Ash Manufacturing functions, overseeing 30 salaried and 104 non-union hourly personnel. Successful utilization of cost control, process capability, behavior based safety, and reliability improvements that have increased production by 15%. Project Manager for \$75MM energy conversion project to convert gas fired calciners to pulverized coal. Project payback 3 years. Restructured production management staff to build future plant leadership and increase capability to meeting changing business needs.

Technical Manager overseeing six Process Engineering, two Project Engineering, Quality and Laboratory staff. Responsible for \$10 – 15 MM annual Capital Budget. Lead engineering development of efficiency gains from waste reduction (\$1.2MM/year savings). Restructured process engineering group to strengthen process improvement capability. Utilized Design of Experience and Multivariable Testing to accomplish significant plant efficiency and productivity gains. This includes a 50% improvement in product quality percent conformance, and 20% reduction in product losses from plant ore dissolution circuit.

#### **FMC CORPORATION, Granger, Wyoming (1995-2001)**

##### **Production Superintendent**

Production Superintendent responsible for setting and achieving business goals for safety, quality, cost, production, and employee development for the production of soda ash and caustic. Responsibilities included the management of seven salaried and 49 union hourly positions for processing ore and alkalinity bearing solutions into soda ash. Additionally, responsible for daily production scheduling and supervision of mill crew and foreman activities, cost forecasting, cost control, and shutdown planning. One year experience as mill production engineer assigned to coordinate process improvement projects with maintenance and technical departments for the soda ash and caustic plants. Two and one-half years experience as a process engineer in the technical department responsible for caustic plant and utilities area process upgrades and project work. Specific project responsibilities includes process modifications for reuse of caustic and soda ash waste streams to improve recovery, plant steam and water balance efficiency tracking, boiler fuel conversion study, acid washing method development, and shutdown contractor supervision.

**BETZ LABORATORIES, Missoula, Montana (1987 – 1995)**  
**Account Manager**

Field engineering representative involved with technical support, sales and service of water treatment systems in the kraft paper, petroleum refining, wood products and mining industry. Responsible for western Montana region coordinating project work at industrial facilities. Experience with high and low pressure boiler systems, influent and effluent clarification, color removal, closed loop, once through, and open recirculating cooling systems, and heavy metal extraction. Engineering projects included wastewater treatment and reuse, optimization of process water usage and waste minimization. Betz Eagle award winner for outstanding sales performance. Responsible for design, installation, and operation of automated feed systems for various applications at customer facilities. Supervisory experience training and managing new employee activities in adjacent territories.

**HYDRO-SEARCH, Inc., Golden, Colorado (1986-1987)**  
**Hydrogeologist**

Consultant involved with hazardous waste site filed investigations and groundwater contamination studies. Responsibilities included ground- and surface-water sampling, well development, recovery testing and interpretation of hydrogeologic data. Additionally, responsible for all geologic and engineering drafting. Knowledge of monitoring well design and drilling experience on government Superfund sites. Supervisory experience on drilling crews for monitoring well installation and geologic profiling.

**Education**

B.S., Geophysical Engineering, 1985, Montana College of Mineral Science and Technology, Butte, MT.

**Additional Training**

Financial Analysis, AMA, March 2002

Multivariable Testing Techniques for Chemical Processes, QualPro, May 2002

Supervisor Training, March 1997

HAZOP Training, March 1997

STOP Safety Training, June 2007

PASS Behavior Based Safety Training, March 2005

Business Acumen, June 2013

References available upon request.