# STATEMENT OF QUALIFICATIONS Edmond Charles Packee Jr., Ph.D., CPSSc., CPESC, CPSWQ, CPISM, CESSWI

# **EDUCATION**

University of Pretoria, South AfricaPh.D. University of Alaska Fairbanks

Mining, 2005

M. Sc. Mine Reclamation Science 1995 B. Arts Biological Sciences 1992

B. Arts History 1992

### REPRESENTATIVE EXPERIENCE

Senior Scientist 1998-Present

3-Tier Alaska/Travis/Peterson Environmental Consulting, Inc.

Responsibilities: Project management and technical environmental support for consulting activities, including storm water pollution prevention plans, environmental liability assessments, permit applications, and geological and hydrological site investigations.

#### **Surface Environment-Researcher**

1996-1998

South African Council for Scientific and Industrial Research

Division of Mining Technology

Responsibilities: Develop a process to quantify the post closure environmental liabilities of collieries. The process developed is based on international environmental standards with special reference to the environmental standards in South Africa. The process is based on iterative risk assessment methodology and is designed to interface with the EIA, EIS, EMPR, and EA processes. Compensation and mitigation alternatives for non-compliance points are expressed in financial terms (on a site basis). The post-closure impact appraisal process allows the aftercare costs of mines to be determined at any point in the mining cycle. Additionally, surface mine design and environmental permitting was performed.

# **Operations Manager**

1995

Steamboat Minerals and Exploration

Responsibilities: Claim management and environmental permitting of hard-rock/placer property. Legal and regulatory consultation with respect to mine exploration programs.

## **Hydrologist (Non-permanent)**

1992-1995

State of Alaska Division of Mining and Water Management

Responsibilities: Measurement of Discharge; collection of Water Quality Samples (Sediment and Trace Metal Sampling); Responsible for installation, maintenance, and removal of 12-16 automated stream gauging/ water sampling sites used for compliance monitoring of placer gold operations. Field management of a placer mine reclamation demonstration project including: initial design; supervision of contractor; monitoring phase design; assessment and purchase of monitoring instrumentation; installation, operation and maintenance of monitoring instrumentation. Laboratory analysis of sediment samples including: total suspended solids analysis, data entry of laboratory results into computer database, generation of stage-discharge relationships, and discharge-sediment relationships. Translation of recorded stage data into discharge. Generation of seasonal hydrographs and sediment loading for each gage site. Perform precipitation and flood analysis.

#### ADDITIONAL SCHOOLING AND CERTIFICATIONS

Certified Professional Soil Scientist, No. 28100

Certified Professional in Erosion and Sediment Control, No. 2337

Certified Professional in Storm Water Quality, No. 0318

Certified Professional in Industrial Stormwater Management, No. 0026

Certified Erosion, Sediment, and Storm Water Inspector, No. 0221

Certified Erosion and Sediment Control Lead (AK-CESCL), exp 3/3/2024

Certified Instructor AK-CESCL, 2008

HAZWOPER 8 hour refresher certificate – Recertification 03/23/2023 exp. 03/23/2024

First Aid/CPR (exp 2/15/2025)

Inter Agency Wetland Delineation Course, USACE, 2003

BMP Selection, Installation, and Maintenance, IECA, Fairbanks, 2001

Risk Assessment for Acid Mine Drainage, CANMET, Sudbury, Ontario, 1999

Wet and Dry Covers for Tailings Impoundments, CANMET, Sudbury, Ontario, 1999.

Acid Mine Drainage Prediction and Control ASSMR, Gillette Wyoming, 1995.

Mining Hydrology. 1998 SME Annual Meeting, Orlando, FL.

### SELECTED PUBLICATIONS

Packee, E.C. 2009. *Placer Mine Reclamation: Design Parameters and Regulatory Implications*. Paper presented at the Alaska Miners Association Annual Meeting, November, Anchorage, Alaska.

Packee, E.C. and G.A. Fourie. 1997. A Procedure for Quantifying the Post Closure Financial Liability for Collieries. In: Eds: Goldsack et al. Sudbury '99, Mining and the Environment II: An integrated approach to Planning and Rehabilitation for the Future. Volume III, September 13, 1999.

Packee, E.C. and J.W. Oberholzer, 1997. *The Financial Valuation of Closed Collieries*. **Mine Closure Colloquium.** The South African Institute of Mining and Metallurgy, Randburg, Republic of South Africa, pp. 69-82.

Packee, E.C. and M.G. Nelson. 1995. *The Utility of Fluvial Processes for Assessing Channel Stability*: paper presented at the 12<sup>th</sup> Annual Conference of the American Society for Surface Mining and Reclamation, June 3-8, Gillette Wyoming.

Nelson, M.G., E.C. Packee, and D.J. Helm. 1995. *Reclamation of an Abandoned Placer Mine Site: Birch Creek, Circle Mining District, Alaska.* IN: Eds: Schiener, T.D. et al., **New Remediation Technology and the Changing Environmental Arena**, SME Publications.

Nelson, M.G., E.C. Packee, and D.J. Helm. 1995. *Placer Mine Reclamation in Alaska*. **Mining Engineering**. March 1995.

Nelson M.G., E.C. Packee, and D.J. Helm 1995. *Placer Mine Reclamation: Current Practice and Research in Progress:* paper presented at the 1995 SME Annual Meeting and Exhibit. March 6-9, Denver Colorado.

Packee, E.C. 1994. The Birch Creek, Mile 101 Steese Highway Placer Mine Reclamation Project: Year One Results, 1993. Interim report to USEPA Region X. Alaska Division of Geological and Geophysical Surveys Public Data File 94-37.