

# CURRICULUM VITAE (CV) RICHARD BRIAN HAYES

Position: DIRECTOR

Name of Firm: SHANGONI MANAGEMENT SERVICES (PTY) LTD

Name of Staff: RICHARD BRIAN HAYES

Profession: ENVIRONMENTAL MANAGEMENT CONSULTANT/  
CHEMICAL/ ENVIRONMENTAL ENGINEER

Date of Birth: 09 December 1969

Years with current Firm/Entity: 9 YRS                      Nationality: SOUTH AFRICAN

Membership in Professional Societies: PROFESSIONAL ENGINEER

## Key Qualifications:

**Total Experience:** 16 years

Experience in field of SHEQ Management: 9 Years (See employment record)

- Managing a team of consultants to Shell Nigeria for the implementation of sound Environmental management systems since 2001.
- Acting as technical director to Shangoni Management Pty(Ltd), servicing the SA Mining and Process industries in Environmental Management, environmental legal compliance and associated services. Clients include De Beers, Harmony, African Rainbow Minerals, PPC, SA Breweries, BHP Billiton
- Integration of Health, Safety, Quality Management systems since 1998
- Establish structured Environmental Management within SA Breweries, which include management systems, resource optimization strategies, etc.
- Acting as Lead CDM Auditor for PriceWaterhouseCoopers
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Experience in field of Engineering and Production: 5 years (See employment record)

- Process Engineer – 2 years (1992-1994)
- Production Manager – 3 years (1994-1996)

## Languages:

English – Excellent

Afrikaans – Excellent

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## Education:

Passed Secondary School with Distinction (Paul Roos Gimnasium, Stellenbosch, SA) - 1987

## TERTIARY EDUCATION

BSc Chemical Engineering (University of Stellenbosch, SA) - 1992

MSc Environmental Engineering (University Nottingham UK) with distinction - 1997

Professional Engineer - 1996

Other Courses include:

EIA in developing Countries – 1997, Nottingham, UK

Rehabilitation Strategies and Ground water management – 1997, Nottingham, UK

Total Quality Management – 1993, Suprachem, SA

ISO 14001 Development and implementation – 1997, SABS, SA

ISO 14001 Lead Auditor – 1998, SABS, SA

OHSAS 18001 Development and Implementation – 2002, SABS, SA  
ISO 9002 Development and Implementation – 1998, SABS, SA  
Conflict Management – 1995, Suprachem, SA  
MBA Short Course (6 Months) – 2000, SA Breweries, SA

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## **Employment Record:**

### **ENVIRONMENTAL CAREER PROGRESSION**

#### **October 2001 – December 2004**

#### **Support SPDC (Shell Petroleum Development Company – Nigeria) in the implementation of ISO 14001. Acting as principle consultant to the HIT team of which specific projects include:**

- Well Engineering: Facilitate and support implementation of ISO 14001 (Achieved certification in August '02)
- Office Services and Catering: Facilitate and support implementation of ISO 14001 (Achieved certification in December '02)
- Acted on numerous occasions as lead auditor, HSE in Place and ISO 14001 audits. Teams audited include: Pipelines East, Pipelines West, Production Area West, Production Area East, Well Engineering, Major Projects, Corporate Aviation, etc.
- Training sessions on the Bow-tie analysis and supporting risk assessment tools.
- Held numerous training sessions on internal auditing and general awareness
- Actively participated in the update of the SPDC Corporate HSE documentation

#### **May 2000 – Current**

Establish Health, Safety, Environmental and Quality Management consulting firm in 1999, merging with Shangoni Management Services in 2000

Detail work included:

- Develop and implement Environmental Management systems for the mining, petrochemical, oil, food and pharmaceutical industries.
- Integration of Health, Safety, Quality, Environmental and Financial Management systems
- Act as ISO 14001 lead auditor for the South African Bureau of Standards (SABS). In excess of 50 companies audited with a total of 1446 audit hours.
- Act as SABS training facilitator for ISO 14001 courses (Development and Implementation & Lead Auditor)
- Acting as technical environmental legal compliance auditor, with more than 2500 auditor hours
- Acting as technical consultant, with specific reference to water management and project feasibility studies.
- Acting as lead auditor to PriceWaterHouseCoopers for CDM projects
- Management roles within Shangoni predominantly financial management duties

### **CDM Related Experience**

Trained as lead auditor by PriceWaterHouseCoopers (SA), 2006

Auditing experience on CDM projects:

- Petro SA Biogas to Energy Project. Undertaking the validation (2007) and verification audit (2008) in the capacity of lead auditor. Also observed by representatives of UNFCCC during the verification audit.
- Star Diamonds Biogas flaring project: Undertaking the validation audit (2008) in the capacity of lead auditor
- Humphries Methane Capture and Electricity Generation: Validation report reviewer (2008)
- New Energies Commercial Solar Heating: Undertaking the validation audit (2008) in the capacity of lead auditor.

**January 1998 – April 2000**  
**SOUTH AFRICAN BREWERIES**  
**Environmental Management Consultant**

Responsibilities focussed on the establishment of environmental management within the South African Brewery operations. This scope of work included

- Water management: Formulate water management programs for all local breweries
- Develop environmental performance benchmarks and criteria for the SA Breweries
- Environmental Management: Identify needs, approach and support for integrating Environmental Management (ISO14001) into the brewery operations
  - Investigate existing practice and environmental threats (due diligence audits)
  - Recommend strategy for board acceptance
  - Develop Environmental Policy
  - Develop Implementation plan for ISO 14001 implementation
  - Successfully facilitated implementation of ISO 14001 at 7 breweries, which included the development of ISO 14001 manuals, environmental impact assessment, operational procedures, training and conducting internal audits to track progress and highlight problem areas. (all breweries obtained certification in less than 8 months after implementation commenced)
  - Ensuring legal compliance by interpreting all applicable environmental legislation and building these requirements into the management systems
  - Setting up an environmental reporting framework

**PREVIOUS WORK EXPERIENCE INCLUDE:**  
**MSc Environmental Engineering – University of Nottingham UK (October 1996 – September 1997)**

Content of MSc focussed on Engineering application in the field of Environmental Management One-year course including a dissertation (Investigation the reuse opportunities for construction waste).

Successfully completed the one-year masters degree with distinction.

**SUPRACHEM (Petrochemical Company)**  
**Product Development Consultant (June 1996 – September 1996)**

- Investigating pitch export opportunities
- Supplying technical backup and assistance to clients
- Investigating market potential for inorganic waste material generated by the steel manufacturing industry

**Head of Production (June 1994 – June 1996)**

Duties focussed on managing all on site plant (tar, nafta and benzol distillation facilities; blending and dispatch). Technically the scope included trouble shooting operational problems on a day to day basis. Was also appointed as project leader for a number of longer term projects which included:

- Steam system upgrade
- Product quality upgrade on Benzol Plant
- Loading facilities upgrade
- Support in the implementation of ISO 9001 and TQM

**Process engineer (Jan 1993 – June 1994)**

Projects included

- Reclamation of waste oil from steel mill operations
  - Model reclamation process
  - Develop requirements for full-scale and upgrade of existing facility
  - Plant commissioning and operation
- Energy optimisation on tar distillation and benzol facilities
  - Pinch analysis
  - Heat exchanger design and implementation
- Upgrade vacuum system on tar distillation