
ABBREVIATED CV

PERSONAL DATA

Company
Position in firm
Nationality
Languages

DHANASHREE NAIDOO

Nemai Consulting
Project Manager
South African
English and Afrikaans

EDUCATION

- BSc Chemical Engineering – University of Natal. Professionally registered Engineer with ECSA
 - Internationally accredited environmental auditor.
 - Social and Institutional Development Certificate – University of Pretoria
 - Completed a course on Agenda 21 by DEAT
 - Public participation certificate – University of Pretoria.
 - Social Impact Assessment Certificate –University of Potchefstroom
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RELEVANT EXPERIENCE

(A) DWAF RELATED PROJECTS

- 1) Developed Provincial Water Sector Plan Guideline.
- 2) Developed concept paper on Water for Growth and Development.
- 3) Developed checklists for EDSS.
- 4) Developed monitoring and auditing guidelines.
- 5) Input on SDMS.
- 6) Input on 2nd Edition CEIMP.

(B) ENVIRONMENTAL AUDITING AND REPORTING

- 1) Completed an environmental and safety audit for the decommissioning of the Grootvlei Power Station.
- 2) Completed an environmental and safety audit for the decommissioning of the Camden Power Station.
- 3) Completed an environmental audit for the decommissioning of the Komati Power Station.
- 4) Completed an environmental and safety audit for the Total Bottling Plant in Dakar, Senegal.
- 5) Completed the verification of the Rand Water Environmental Report for 2001.
- 6) Completed an environmental report for the Pindamondagaba development in Brazil.
- 7) Completed environmental auditing of all landfills in Gauteng for the provincial government.

(C) ENVIRONMENTAL ENGINEERING

- 1) Environmental design review of the Naphta Tar Extraction Plant at Sasol.

- 2) Environmental design review of the upgrade of certain process at Sapref plant.
- 3) Environmental design of the Total Gas Bottling Plant in Senegal.

(D) AIR, WATER AND SOIL MONITORING AND CONTROL

- 1) Catchment Study. Determine the impact of raw sewage in the Elands River Catchment area on the Valkopdam.
- 2) Catchment Study: Impact of defunct mines on water quality in the Loskopdam catchment.
- 3) Water quality analysis for the Jukskei and the Klipspruit Catchment.
- 4) Soil and Ground water monitoring, quality control and remediation measures for Collect-a-can site in Vanderbylpark. The soil was highly contaminated with various inorganic chemicals.
- 5) Soil, water and air quality analysis for chemical spill at the Eskom Phalaborwa sub-station site. The polluting agents were essentially phosphates.
- 6) Air emission control management at Eskom Power Stations. Monitoring plans were implemented to assess air emission from the stacks. Various cleaning technologies were investigated.
- 7) Air emission analysis at the Cast Iron Pipe Factory in Pretoria. Review and compared smelter technologies. This formed part of the EIA study for the construction of a new plant; however, the study did include review of air emission monitoring on the existing plant. This was a requirement from CAPCO.
- 8) Scale Inhibitors: Study done in conjunction with the CSIR to determine the impact of the use of scale inhibitors at Eskom Power Stations on water quality.
- 9) Air, water and soil analysis at the Total Senegal Plant. Did trial studies of dispersion tests at the plant in order to satisfy the French Environmental Legislation.
- 8) Kendal Power Station Water Balance – Prepared software package to monitor water usage and effluent use at the station.
- 10) Simunye Return to Service (RTS) Report – Performed feasibility and environmental study and made recommendations on process water, effluent and stormwater management, cooling water system, chemical dosing systems, and air emission control and sewerage treatment system for Grootvlei Power Station.
- 11) Environmental Review – Responsible for interpreting ground and surface water analysis in accordance with the drinking water standards as set out by the DWAF within Eskom

(E) RESEARCH PROJECTS (in conjunction with various institutions)

- 1) Hydrogen Research – Engaged in research associated with the novel approach of handling and venting contaminated hydrogen mixtures.
- 2) Scale Inhibitors – Used regression test analysis to determine whether the generic approach to scale prevention within Eskom was possible and the environmental effect on the ash dams of dosing scale inhibitors.
- 3) Hydrogen Venting – Responsible for performing all calculations associated with the venting of hydrogen air mixtures. Reviewed and commented on hydrogen handling specification/standard. Completed extensive literature surveys locally and internationally.
- 4) Fire Protection – Part of design team responsible for novel approach to conveyor belt protection. Wrote software package to predict effects of water droplet sizes on extinguishing fires. Completed extensive literature surveys locally and internationally.

- 5) Crystallisation Modelling – Extensively involved in the modelling of the growth of calcium sulphate crystals, optimisation of crystallisation processes and investigating the effects of various parameters on the growth of crystals.
- 6) Completed literature search on public participation in water related projects in third and first world countries.

(F) COMPILING SPECIFICATION DOCUMENTS

- 1) Majuba Power Station Cooling Water Treatment Plant – Compiled detailed design technical specification document for the cooling water treatment plant that when out on tender.
- 2) Hendrina Power Station Lime Dosing Plant – Compiled design specification for new lime dosing plant.
- 3) Condensate Polishing Plant – Part of technical team that was responsible for compiling the detail specification document for Majuba power stations CPP.
- 4) Demineralisation Plant – Part of technical team that was responsible for compiling the detail specification document for the Demin plant at Majuba Power Station.
- 5) Kriel Power Station Modifications to the Recovered Water System – Prepared the design specification for the modification to the recovered water system at the station.

(G) RISK ASSESSMENTS

- 1) Total Gas holding facilities, Senegal – Completed Risk Assessment Study for the existing infrastructure as well as a new gas sphere and bottling plant. The study was done in accordance to the French Legislation.
- 2) Contingency Plans for Simunye Power Station – Compiled document presenting the various contingency plans, in the event of an environmental disaster, for the different decommissioned stations. The report was aimed at satisfying the needs and requirements set by the DWAF and DEAT. Focused on HAZOP analysis and pollution control from a design point of view.
- 3) Risk and Environmental Impact Assessment and Integrated Environmental Management – Reviewed and commented on numerous RIA's, EIA's and IEM's for the various Eskom stations.
- 4) Prepared oil spill contingency plans for Eskom wide power stations.

(H) WASTE MANAGEMENT

- 1) Part of audit team responsible for waste disposal sites especially at Arnot Power Station
- 2) Reviewed medical waste practices at the Groothoek Hospital in the Northern Province. Responsible for co-ordinating all the various departments in the Northern Province in resolving illegal dumping of medical waste in the province.
- 3) Completed various studies and audits on the Eskom ash dumps.
- 4) From April 2000 to date I have been employed by the Waste Management Division in Gauteng to review EIA studies submitted by consultants, to be part of the Medical Waste Management Project, to investigate the remediation of contaminated soil and to undertake indepth literature survey of rubber re-cycling nationally and internationally.

(I) TECHNICAL PROJECTS

- 1) Kendal Power Station Wet Cleaning System – Carried out site investigations. Compiled operating philosophy to reduce water consumption, after doing a feasibility study of the systems. Focussed on environmental concerns associated with the reticulation of polluted water around the station. Reviewed all analytical data.
- 2) Matla Power Station – Excess Water Management – Responsible for interpreting plant data and offering the station technical support. Investigated a novel approach to dealing with sulphate-saturated water. Assessed the effect of mine wastewater on the surrounding environment.
- 3) Duvha Power Station – Mechanical audit on the stations hydrogen plant was awarded to external contractors. Due to various reasons I was contracted in by the contractors to interpret the findings of the audit and propose future recommendations for the improvement and safety of the plant.
- 4) Matla/Kriel Power Station Pre-treatment Plant – Investigated various operating scenarios to alleviate excess polluted water problems and the consequences of the environment.
- 5) Majuba Water Balance and 2 Shifting Scenario's – Prepared a water balance programme tailored to suit Majuba Power Station's unique operating regime of both wet and dry cold systems. Concentrated on the impact of 2 shifting on the stations water consumption.
- 6) Potable Water Production – Investigated life extension studies on potable production within Eskom's decommissioned stations. Evaluated projected water demands on the various water schemes and the effect on downstream users in the event of increased demand.
- 7) Duvha Power Station Blowdown System – Part of design team that investigated the re-routing of boiler blow downs.
- 8) Kendal Power Station Water Balance – Prepared software package to monitor water usage and effluent use at the station.

(E) Management

- 1) Managed the EMP study for the Maputo Corridor in Mozambique. This involved co-ordinating the construction programme, the Social investigation, the Environmental study and working with the South African and Mozambican Environmental Departments, the various Contractors and the Trans African Consortium. This was the largest project in both countries to be designed in accordance to ISO 14001 standards.
- 2) Project managed the environmental programmes for 70 Build, Operate, Train and Transfer (BoTT) projects in the Northern Province. This was an initiative programme from the then Kadar Asmal Projects. Prepared business plans and area development plans for METSICO, the consortium appointed by DWAF to facilitate the projects.
- 3) Endangered Wildlife Trust: Fund for the re-introduction of the Blue Cranes into Seekoeivlei area. Responsible for securing funding for this project from the Ingérop Group, a French based consortium. Managed the project for them in South Africa.
- 4) Managed a R600 000 000 project from DBSA for the EIA and EMP study on a 1000km long Fibre Optic Communication Line in Mozambique. The Client is TDM and the project starts in Beira in the North and runs to Maputo in the South. The entire project is in accordance to ISO 14001 standards. This was the first project of its kind in Mozambique.

- 5) International and National Manager for all Bergman Ingérops Environmental Divisions. Appointed by the company in April 1998 to start an in-house environmental division. The company expanded in this field and now has 5 local departments and 4 international departments.
- 6) Prepared Business Plans for future community development projects.

(F) Institutional and Social Development

- 1) Social development in Zonkesizwe, Voslorus, Villa Liza, the Ned Pillay camp and Zama Zama camp. Each study involved the training and development of local people in maintenance and operation of stand pipes, water wise principles, recycling of waste and safety issues pertaining to pipelines in the area.
- 2) Reviewed encroachments on Spoornet property. Advised on the training and empowerment of community members.
- 3) Responsible for the investigation for an Air Quality Management Strategy in Gauteng. All stakeholders on a national and local government level were interviewed. Did a complete survey of responsibilities at each level of government. Completed a statistical analysis of the findings. Assessed the interaction of inter-governmental departments and the success thereof.
- 4) Presently part of the National steering committee, which was established by DEAT to review the principles for an Environmental Education Strategy for the country. This includes determining the feasibility of the strategy, methods of educating the country on their environmental rights, procedures for training government staff members and the responsibilities of the private sector.
- 5) Presently completing a social survey for DWAF, on the impact of defunct mines in the Loskopdam catchment area on the social environment.
- 6) Responsible for the partial management and training programme for all ISD functions on the BoTT projects in the Northern Province from 1998 to 1999.
- 7) Empowerment through training of PSC members to understand the scope and consequences of project business plans on water related projects.
- 8) The training and development of PSC members in the Boksburg and Germiston Council area in project management skills, chairing meeting and an introduction to the environmental principles on all water related projects.
- 9) Responsible for the selection and training of labour desk officers in the management of local work force during the construction phase of Rand Water projects. Each CLO was an unemployed member of the affected community and the end of each course which is approximately 6 months was issued with certificates.

(G) EIA's, SIA's and EMPs'

- 1) Boksburg Cason Pipeline –Completed detailed EIA for the construction of a 13 km pipeline.
- 2) Bethal Pipeline – EIA on a pipeline in Bethal. Pipeline goes through very sensitive environments.
- 3) EIA for filling station in Weltevreden Park
- 4) Cement Mortar Lining – EIA for the cement mortar lining of a 30 km pipeline in Zonkesizwe and Vosloorus

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- 5) Total Gas holding facilities, Senegal – Completed Environmental Impact Assessment Study for the existing infrastructure as well as a new gas sphere.
 - 6) EIA and SIA of 30km long pipeline in Germiston.
 - 7) EIA, SIA and EMP for 13km long pipeline in Boksburg. Responsible for the relocation of informal dwellers on the servitude in Villa Liza. Instrumental in rezoning the servitude area as public open space so that the community of Villa Liza and Windmill Park ext 2 can now use the land for recreational purposes. This is a novel approach.
 - 8) EIA for Casino Development in Queenstown. Involved details Social Impact Assessment study of the project on the community and EIA because the casino is to be located in the De Lange Nature Reserve.
 - 9) EIA for Cast Iron Pipe Factory in Pretoria. Was successful in getting the Client, Stanton from the UK, an exemption on the project.
 - 10) EIA and EMP for pipeline for Hartbeespoortdam Local Town Council
 - 11) EIA, EMP and SIA for toll Facilities, Boardwalk and Parking Area for Hartbeespoortdam Local Town Council
 - 12) EIA and EMP for water reticulation project in Piet Gouws.
 - 13) I was employed by the Inspectorate Division in Gauteng for the period from January 2000 to March 2000 as a Senior Environmental Officer.
 - 14) EMP and social survey for the Witbank to Maputo Toll road on the Mozambican side.
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"I Dhanashree Naidoo confirm that the above CV is an accurate description of my experience and qualifications.

Signed

D. Naidoo

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Date