1975 - 2002

Director of Mining and Environmental Unit responsible for both business development and technical and financial management of projects. Experience included technical supervision of a wide range of metalliferous and non-metalliferous extractive industrial and EU research projects.

Mine Projects:

Project management and technical direction including planning, feasibility and permitting studies, design and construction supervision of waste/tailings disposal facilities, inspection and monitoring and preparation of environmental studies and closure plans for mine sites around the world. Appointment as competent person under Mines and Quarries (Tips) Regulations for the inspection of a number of mine waste tips and lagoons. Projects include:

- Pb/zn Ireland Investigation and reporting on an underground failure adjacent to a tailings management facility
- Au Portugal Expert technical overview of a new mine project including tailings management facilities
- Pb/zn Ireland Expert review of planning application for mine extension including tailings management assessment
- Au Romania Director of technical and environmental mine development studies
- Au Turkey Expert review of new mine project for Euromines
- Cu/Zn Portugal mine waste rock disposal/paste filling studies both underground and to surface
- Au Greece Feasibility study of tailings management facility for new gold mine project
- Au/Pb/Zn Stratoni, Greece Director of tailings dam design and construction and water treatment studies
- Au Portugal Environmental, mine planning and waste disposal studies for heap leach project
- Cu/Zn Spain Director of design and construction of tailings management facility
- Fluorspar UK Geotechnical study of open pit stability and tailings dam audits
- Cu/Pb/Zn Spain/Bulgaria Expert report on tailings management facilities for UK listing authority
- Borax Argentina Director of resource evaluation and mine planning for two open pit operations
- Cu Bulgaria Expert safety and stability audit of 80 m high tailings dam
- Bentonite Philippines Technical Director mineral resource and environmental evaluation study
- Cu/Pb/Zn/Au Argentina Technical Director of tailings dam closure design and implementation
- Pb/Zu/Au Olympias, Greece Technical Director for both engineering design and project environmental monitoring of 140 m high tailings dam
- Cu/Au Skouries, Greece Technical Director for bankable feasibility study including project environmental assessment and engineering study of 200 m high tailings dam
- Au Spain Technical Director of baseline environmental study for new mine project
- Coal Staffordshire, UK Statutory audit of coal slurry lagoon and of remediation measures
- Bentonite Greece Director of European Union research project into development of bentonites/zeolites for environmental use
- Borax France Director of environmental and engineering audit of waste disposal facility and process plant including engineering and closure studies
- Borax Argentina Director of environmental and engineering audit of mining, waste disposal and process operations including geotechnical, mine planning, environmental and hydrogeological studies
- Ti Kenya Project Director of technical assessment of engineering and waste disposal planning for new industrial mineral project
- Pb/Zn Spain Expert audit of 2 tailings dams together with subsequent directoral responsibility for dam rehabilitation and engineering and environmental studies
- Phosphate Romania Director of EU research project into development of revegetation strategy for waste dumps
- Ur/Cu Bulgaria Director of EU research project involving environmental characterisation and risk assessment of mine waste dumps
- Sn Wheal Jane Minewater Project technical director of hydrogeological, acid mine drainage, active and passive treatment studies including project management of implementation treatment phase of long term scheme
- Au Furlei, Italy Due diligence study for new mine
- Sn, Cu/Zn Clemows Valley Tailings, UK Dam planning, design construction supervision, statutory inspection, monitoring and environmental studies for 47 m high facility

- Coal Ibstock, UK processing plant waste disposal study
- Sn South Crofty, UK hydrogeological, closure and acid mine drainage studies
- Ur Bessines, France passive treatment studies
- Sn Wheal Maid Tailings Dam, UK planning, design, construction supervision, environmental, statutory inspection and monitoring studies for three embankment dams
- Sn Wheal Jane Mine Complex, UK hydrogeological study of existing and ancient mine workings and planning studies for future waste disposal sites
- Sn Porkellis Moor, UK planning waste disposal hydrological and tailings dam studies for mine development and 10 m high facility
- Au Cononish, Scotland tailings disposal hydrological and environmental studies
- Si Levenseat, Scotland planning and waste disposal studies including investigation of existing depository
- Au Omagh, N. Ireland planning, hydrological, hydrogeological and environmental studies together with design and investigation of 14 m high waste disposal facility
- Sn Redmoor, UK planning hydrological and waste disposal studies for 54 m high tailings dam.
- Pb/Zn Lisheen, Ireland coordinator of expert review of mine planning, mineral processing, hydrogeology, environmental assessment and closure plan, waste disposal and acid mine drainage. Specialist expert on the tailings management facility
- Pb/Zn Galmoy, Ireland expert review of tailings disposal facility and hydrogeology
- Pb/Zn Tara, Ireland waste disposal studies and environmental assessment of tailings dam raise
- Au/As Montredon, France Tailings Dam design and construction supervision of 30 m high disposal facility
- Au/As La Caunette, France Tailings Dam inspection, stability review and preparation of stabilising measures for existing tailings dam 12 m high
- Au/As Kassandra, Greece review of mine waste rock, tailings disposal and acid minewater as part of EU research project
- Au Olympias, Greece review of tailings disposal facility as part of EU research project
- Si Chelford, UK waste disposal, planning, environmental assessment, design and construction overview of 17 m high depository
- Si Warren North, UK planning design and construction supervision of 16 m high tailings dam
- Si Warren South, UK investigation and review of existing depository, preparation of closure plan
- Cu/Sn Neves Corvo, Portugal design and construction review including hydrogeological study, closure planning, and annual safety, stability and environmental performance monitoring and inspection of 38 m high tailings dam and associated pollution control structure
- Cu Mamut, Sabah acid mine drainage/passive treatment study
- Cu/Au Ok Tedi, Papua New Guinea design and seismic risk analysis of 110 m high tailings dam
- Cu Mufulira, Zambia specialist studies, post failure, of methods of tailings density stabilisation liquefaction and movement into existing workings
- Cu Mufulira, Zambia design and planning studies for tailings dam
- Sn Ayer Hitam, Malaysia slope stability design and planning, waste disposal studies
- Sn Kuala Langat, Malaysia dredge mine planning, stability and tailings properties studies
- Sn Sungei Way, Malaysia waste disposal and slope stability studies
- Sn Sungei Besi, Malaysia open pit stability studies
- Fe Tom Price, Australia design of instrumentation system for 73 m high cyclone dam
- Al Ghana Bauxite, Ghana waste disposal and slope stability studies
- Sn Carnon Valley, UK statutory inspection and stability studies of tailings dams
- Sn Carrock Fell, UK planning studies
- Cu Malanjkhand, India
- Cu Sohar, Oman environmental performance monitoring and water balance studies
- Lignite Megalopolis, expert review of environmental assessment for open pit mine extension with respect to hydrological aspects
- Pb/Zn Spain, environmental baseline studies for new mine
- Sn Pendarves, UK design and construction supervision of process mill and crusher for mine extension
- Cu/Aux Lepanto, Philippines shaft stability studies
- Sn Goss Moor, Red Moor, Criggan Moor, UK planning, geotechnical and hydrological studies for mine development
- Coal Lynemouth Construction supervision of ash lagoons

Hydro power/water Resources:

Feasibility studies, design and contract documentation, construction supervision, inspection and post construction monitoring including statutory inspections under UK Reservoirs Act. Projects include the following:

- Reservoirs Act 1975, appointment as Supervising Engineer reservoirs in Kent, Sussex and Staffordshire
- Kachulka, Bulgaria annual safety and stability audit of 12m high industrial water supply dam
- Kassandra Mines, Greece design of lined water storage facilities
- Campo Quijano, Argentina design and construction of two lined process water lagoons
- Sotiel, Spain expert audit of 28 m high thick arch dam
- · Various, UK statutory inspections of embankment dams and spillways under UK Reservoirs Act
- Gitaru NES, Kenya design of 30 m high dam and spillway
- Kamburu, Kenya slope remediation studies of asphaltic membrane dam
- Ewaso Ngiro, Kenya geological and geotechnical studies of 3 dams (up to 130 m high)
- Ulu Jelai, Malaysia geological and geotechnical studies of 6 dam sites up to 170 m high
- Ulu Jelai, Malaysia geological and geotechnical studies of 80 low height intake sites
- Liwagu, Sabah geological and geotechnical studies of 4 dam sites up to 100 m high
- Sook, Sabah review of proposals for 75 m high dam
- Tenom Pangi, Sabah investigation, design and construction overview of 50 m high dam
- Lupohlo Ezulwini, Swaziland review of extension of existing scheme
- Mufulira, Zambia Construction supervision of 25 m high flood prevention dam
- Blantyre Water Board, Malawi statutory inspection of three water supply dams for insurances purposes
- Nkula Falls, Malawi design and post construction inspection and monitoring of 25 m embankment dam
- MOS Salsigne, France design and construction supervision of Mine Water Supply Dam
- Neves Corvo Mine, Portugal annual inspection and stability review and design of instrumentation for 16 m high water Supply Dam
- Neves Corvo, Portugal annual inspection of a number of pollution control dams up to 10 m high
- Bent Farm Quarry, UK design of 8 m high guarry restoration dam
- N. E. Kerry, Ireland planning and feasibility studies for two major dam sites (up to 40 m high)
- Severn Estuary, UK preparation of report on tidal power development

Quarry Development/Landfill Projects:

Feasibility studies and preparation of planning documentation for a number of projects with respect to quarry development, environmental assessment, tailings disposal, pollution control, landfilling, hydrogeology, environmental management plans. All projects included discussions with Statutory consultees, presentations to planning committees, interested bodies, etc. Projects include:

- Appointment under Quarry Regulations to undertake geotechnical risk studies for 14 quarries
- Moira Quarry technical director contract supervision of landfilling and closure of open cast site
- Carnsew Quarry technical director of environmental and engineering planning study for quarry development for landfill
- Donington Quarry technical director of engineering and landscaping of closure of open cast site including contract supervision
- Shelford Landfill design and implementation of quarry extraction and landfilling including numerous geotechnical, hydrogeological and hydrological studies
- Newington Quarry Landfill planning studies hydrogeological and stability studies for proposed quarry extension and landfill including noise assessment for quarry extension
- Penlea Waste Management study to assess landfill and general waste disposal capacity of existing dimension stone quarry
- Cansford Quarry mineral resource and landfill study of existing quartzite quarry
- Knowle Waste investigation preparation of landfill licence application
- Eartham quarry planning, hydrogeological waste management and landfill study of existing sand/gravel quarry
- Whitehall landfill preparation and long term monitoring as part of environment management plan
- West Hythe landfill preparation and long term monitoring as part of environment management plan
- Scotney Court waste disposal, quarry planning, hydrological and environmental studies for extension of sand/gravel quarry
- Bent Farm hydrogeological quarry planning, environmental assessment and planning application documents for silica sand quarry

- White Moss hydrogeological, quarry planning, environmental assessment and planning application documentation for silica sand quarry
- Bramcote special waste licence application for existing landfill site
- Milcell geotechnical investigation and rehabilitation study for housing development
- Holmethorpe geotechnical investigation and rehabilitation study
- North Park Farm hydrogeological and quarry planning, environmental assessment and planning application document
- Chelford hydrogeological and quarry planning, environmental assessment and planning application document for silica sand quarry
- Arclid Quarry hydrogeological and quarry planning, environmental assessment and planning application document for silica sand quarry
- Leziate hydrogeological and quarry planning, environmental assessment and planning application document for silica sand quarry