

Nerena Rhodes

TECHNICAL DIRECTOR – CONTAMINATED LAND

Nerena has over 20 years' experience in the investigation, management and consenting of environmental discharges. Nerena's experience includes consultation and communication with a wide variety of stakeholders on complex environmental issues. She manages large investigation and remediation projects, and national monitoring programmes. Nerena has significant experience with the investigation and management of PFAS in the New Zealand environment. Nerena has been conducting PFAS-specific site investigations consistently since 2015. During this time she has assisted many clients to manage the effects of PFAS contamination on the environment and their operations.

CORE EXPERTISE

- ✦ Project and programme management
- ✦ Contaminated site investigations and remediation
- ✦ Risk assessment
- ✦ Assessments of Environmental Effects
- ✦ Technical reporting
- ✦ Suitably Qualified and Experienced Practitioner (SQEP)

MANAGEMENT EXPERIENCE

- ✦ Regulator and stakeholder engagement
- ✦ Relationship management
- ✦ Large value budget and contract management

CAREER SUMMARY

During her career Nerena has worked on projects throughout New Zealand gaining experience in the following key areas:

- ✦ Client relationship management.
- ✦ Managing large and complex projects with teams of scientists and engineers to achieve excellent outcomes for clients.
- ✦ Human health and environmental risk assessment.
- ✦ Investigation and management of emerging contaminants such as per and polyfluoroalkyl substances (PFAS).
- ✦ Remedial options assessment and remediation.
- ✦ Preparing AEEs and consent applications, conducting environmental investigations, and working with District and Regional Plans and Councils.
- ✦ Environmental management of industrial and development sites including contaminated sites, open and closed landfills, refuse transfer stations, ports, airports, engineering workshops, wastewater treatment plants, residential and commercial developments and the like.

Qualifications

MSc (Environmental Science), University of Auckland, 2005

BSc (Biology), University of Auckland, NZ, 2002

Affiliations

Member of Australian Land and Groundwater Association (ALGA)

Training

Site Safe – Consultants Passport
Prince2 Certified Project Manager

Career Summary

2020 – Present
Technical Director – Contaminated Land
Pattle Delamore Partners Ltd, Alexandra

2012 – 2020
Environmental Science Service Leader
Pattle Delamore Partners Ltd, Auckland

2007 – 2012
Senior Environmental Officer
New Zealand Defence Force, Auckland

2005 – 2007
Environmental Coordinator
Envirowaste Services Ltd, Auckland

2004 – 2005
Pollution Response Officer
Auckland Regional Council, Auckland

2003 – 2004
ISO 14001 Coordinator
Frucor Beverages Ltd, Auckland

PROJECT EXPERIENCE

Kaipara District Council, Bickerstaffe Closed Landfill Consent Application and Remedial Works

Project manager and technical reviewer of a consent application for the remediation of a closed illegal landfill on the shores of Kaipara Harbour. The project included a planning assessment, assessment of environmental effects, concept design for earthworks, remediation of the landfill and adjacent foreshore, sediment quality investigation and reporting, remedial action plan and monitoring and management plan. Author of the AEE, remedial action plan and monitoring and management plan. Consents were required for disturbance of contaminated soil, removal of mangroves, reclamation, structures in the coastal marine area, earthworks, stormwater and ongoing discharges of contaminants from waste disposal. The remediation was designed to reduce the risks from exposed refuse at the site and included removal of waste (including asbestos containing material) from the foreshore, capping exposed refuse and constructing a buttress at the seaward edge of the landfill.

New Zealand Defence Force, PFAS Investigation Management

Since 2015 Nerena has been providing the New Zealand Defence Force specialist expertise in the investigation and management of an emerging contaminant (PFAS) on the Defence estate. This has included planning and managing the investigations of over 100 private properties in the vicinity of Ohakea and Woodbourne Airforce Bases, and other NZDF sites, management of the 7 consultant firms contracted to carry out the monitoring and reporting for each monitoring round over four rounds of sampling during the early investigation period in 2017 and 2018. Nerena has been responsible for the PFAS sampling programme and production of reports. Work includes:

- ∴ Preliminary Site Investigations
- ∴ Detailed Site Investigations
- ∴ Human health and ecological risk assessment
- ∴ Remedial options assessment and remediation
- ∴ Preparation of reports for landowners and for the All of Government National PFAS Programme
- ∴ Representing NZDF at the All of Government forum and to community stakeholders
- ∴ Long term monitoring of groundwater plumes and surface water receptors.

Ohakea Managed Fill Contaminated Site Management, New Zealand Defence Force

Project manager and technical specialist for a consent application to develop a managed fill at Ohakea Airbase for the disposal of PFAS contaminated soil. Project included assessment of sample results of the source soil (total and TCLP) and the receiving environment, development of waste acceptance criteria, human health and environmental risk assessment, remedial options assessment and recommendation of a preferred remedial option, and the development of procedures for the treatment and disposal of soil within the fill.

Hobsonville Land Company, Consent Applications and Remediation

Project manager and technical specialist for multiple consent applications associated with remediation of contaminated land on a former Airforce Base. The development was conducted over multiple stages with consents applied for separately for specific stages of development. The project included preparation of assessments of environmental effects, and preparation of technical reports, including preliminary site investigation reports, detailed site investigation reports, remedial action plans, and site validation reports prepared in accordance with the MfE guidelines. Contaminants of concern included ammunition associated with firing ranges and ammunition disposal, lead based paint and asbestos building materials. Provided technical expertise to the contractors and construction engineers during the remediation process.

OMV, PFAS Risk Assessment

Technical specialist and reviewer for the assessment of risk to grazing cattle and to human health associated with PFAS in soil and water at a former fire training facility in the lower North Island. Work included the development of site-specific trigger values to support the future site land-use.

Confidential Client, PFAS Investigations and Advisory

Technical specialist and reviewer providing technical advice relating to fire-fighting foams and PFAS to a large client in the petroleum hydrocarbon industry in the upper North Island. This includes site investigations, responses to accidental releases and advice on waste disposal and transition to fluorine free foams.

Auckland Transport, AMETI Contaminated Site Management and Remediation

Project manager for contaminated site investigation, management and remediation for the construction of the AMETI Eastern Busway in Auckland, a very large transport infrastructure project. The project included preparation of a preliminary site investigation report, sampling and analysis plan, sampling for contaminants associated with historic land use (including metals, asbestos and petroleum hydrocarbons) and for acid sulphate soils, preparation of remedial action plans / site management plans and advice to the contractors and clients regarding remediation and management of asbestos pipes, contaminated soils, water and acid sulphate soils. This project was completed successfully over the three year construction timeframe with PDP assisting the client to manage risks including acid sulphate soils and unexpected discoveries of asbestos pipework and other buried asbestos containing materials.

Confidential Client, Stream Remediation Consent Application

Prepared an assessment of environmental effects for resource consents to remediate a stream following a diesel spill and remove riparian vegetation within a protected area. Developed the methodology for stream remediation which was accepted by Auckland Council and documented in a Stream Remediation Plan. Conducted consultation with iwi as part of the Cultural Impact Assessment process.