Beyond the Buzz: Real-World AI Agents in Contaminated Land Reporting

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The AI revolution is here—or so we're told. While generative tools like ChatGPT have quickly become commonplace for tasks such as email drafting or text summarisation, their application in environmental consulting remains underdeveloped. The question is no longer "Is AI coming?" but rather: "How do we adopt it meaningfully—beyond basic content generation?"

A 2023 Goldman Sachs report estimated that over 40% of consulting workflows would be affected by AI within five years. Now, nearly halfway through that window, most environmental consultancies are still navigating how to shift from experimentation to operational value. This presentation addresses that challenge by exploring how AI agents—specialised models trained to perform high-quality, domain-specific tasks—can be embedded directly into contaminated land workflows.

In a collaborative project with practising consultants, we co-developed and tested an AI-enabled workflow that supports report generation using firm-specific language, curated knowledge bases, and human review. Rather than positioning AI as a replacement for expertise, this system was designed to act as a digital assistant—improving efficiency, consistency, and quality without compromising professional judgment.

The workflow integrates:

- Site-specific data from field collection tools (e.g. Gather) and historical documents(e.g. PDFs);
- Custom knowledge bases curated by consultants, including guidance documents, company standards, and report examples;
- AI agents that draw on this content to draft tailored report sections;
- Human-in-the-loop review for quality assurance and regulatory compliance.

Early testing showed measurable benefits:

- Significant reductions in drafting time for routine report sections;
- Overall decreases in report preparation time;
- Greater trust in outputs when AI was trained on firm-specific language and reviewed collaboratively.

By embedding AI directly within tools already used by consultants, adoption was intuitive and impact immediate. The system enhanced—not replaced—professional workflows.

This presentation, delivered by an environmental consultant who helped pilot the solution, will share:

- Key lessons from development and user feedback;
- Accuracy benchmarks and performance data;

Strategies for integrating transparency, auditability, and regulatory prompts;

- Practical considerations for scaling AI adoption within contaminated land practice.

Rather than hype or theory, this session offers a grounded look at how AI can serve as are liable, efficient partner in the field—supporting better outcomes for consultants, clients,and communities.

Tom Davies

Tom Davies is the COO and co-founder of Datanest, a workflow automation platform purpose-built for environmental professionals, with a particular focus on contaminated land consultants. Drawing on over a decade of hands-on experience in the environmental consulting industry, Tom understands the complex challenges of site investigations, data interpretation, and regulatory reporting—because he's been there.

Before founding Datanest, Tom worked as a contaminated land consultant across Australia and New Zealand, managing multidisciplinary site assessments and navigating the inefficiencies of manual data handling and repetitive report writing. Frustrated by the time lost to administrative tasks, he began exploring how technology could streamline and modernise environmental workflows.

That vision became Datanest: a digital platform that empowers consultants to design and deploy their own data collection forms, integrate field and laboratory data, and generate reports with greater speed and accuracy. As COO, Tom leads product strategy and customer engagement, ensuring the platform continually evolves to meet the real-world needs of environmental professionals.

Most recently, Tom has overseen the integration of AI capabilities within Datanest—specifically through the use of AI agents designed to assist with report generation. These agents allow consultants to input data, reference firm-specific knowledge, and co-create regulatory-ready content in a fraction of the usual time. Importantly, the AI is designed not to replace expertise, but to amplify it—ensuring accuracy, auditability, and transparency remain front and centre.

Tom regularly collaborates with industry groups and environmental fi rms to co-designsolutions that are both innovative and practical. His goal is simple: help consultants spendless time formatting reports and more time solving real environmental problems.