Phil White

Technical Director, Responsible Consumption and Production

CAREER SUMMARY



Phil is a Chartered Waste Manager with 30 years' experience in the environmental sector, including over 25 years in waste regulation, policy, and consultancy. Prior to joining WSP, Phil led the UK Waste and Resource Recovery & Circular Economy team at a UK sustainability consultancy for 3 years, and previously led the Waste Technical Services team at Ricardo Energy & Environment for 9 years, where he established and led Ricardo's waste due diligence and expert witness capability.

Phil has provided expert opinion in commercial & insurance disputes and civil & criminal matters since 2010, supported by extensive technical and commercial knowledge and 8 years' investigation and enforcement experience as a regulator at the Environment Agency. He has acted as an independent expert in many prosecutions and disputes, preparing numerous expert reports. Phil has experience in adjudications, arbitration, Crown Court cross-examination, tribunals, and joint expert discussions. Phil's criminal expert experience includes, for example, matters involving illegal waste shipment, illegal waste deposit, statutory duty of care offences, and environmental permit breaches. As Project Director, Phil has also provided review and quality assurance of reports by other named experts.

Phil has experience in successfully leading consulting teams with a broad portfolio of advice covering the life cycle of waste infrastructure projects. He is experienced in providing strategic and operational advice, including waste treatment technology performance, selection, and options appraisals; technical, commercial, and regulatory due diligence assessments; regulatory compliance and permitting; waste infrastructure procurement (for both municipalities and bidders); and waste facility construction and operations monitoring. He has acquisition (companies and assets) due diligence experience on the buy and sell-sides and has provided commercial advice for companies entering the UK market.

Phil's experience enables him to advise across a comprehensive range of waste types, recovered materials and processing technologies. This includes mechanical recovery facilities (MRF), organic waste recovery (composting and anaerobic digestion), integrated mechanical-biological treatment (MBT), secondary raw material production for recycling and recovery, refuse derived fuel (RDF) production, energy from waste thermal treatment, and advanced conversion technologies.

Prior to consulting, as an Environment Agency officer in policy, strategy, operational, and enforcement roles, Phil developed in-depth working knowledge of waste policy and legislation, including through site inspections and prosecutions. Phil also has specific experience in the definition of waste and 'end of waste', where material is fully recovered and no longer classified as waste. From 2007 to 2011, Phil was the seconded lead Technical Advisor to the joint Agency and WRAP (Waste & Resources Action Programme) end of waste Quality Protocols (QP) Programme. He led the development of several QPs and advised on complex technical and definition of waste issues in liaison with the Agency's policy, technical and legal teams, and Defra. Since 2011, Phil has written guidance on how to achieve end of waste and prepared industry positions.

First year with WSP

30 years of experience

Area of expertise

Waste treatment technologies, resource recovery & sustainable resource management, commercial & regulatory due diligence, waste infrastructure procurement, end of waste, waste policy & legislation, expert witness in criminal and commercial matters.

Language

English

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EDUCATION

BSc (Hons), Geography, University of Leeds	1993
MSc (Eng), Water Resources Technology & Management, University of Birmingham	1994

PROFESSIONAL MEMBERSHIPS

Chartered Waste Manager (Chartered Institution of Wastes Management)	2005 - Present

PROFESSIONAL HISTORY

WSP, Technical Director	2024 - present
Anthesis (UK) Ltd, Associate Director	2021 – 2024
Ricardo Energy & Environment (previously known as AEA Technology), Technical Director	2012 - 2021
RPS Group, Associate Director	2006 - 2012
Environment Agency, Environment Officer; Enforcement Officer; Waste Strategy Policy Advisor	1998 - 2006
WS Atkins, Environmental Scientist (including secondments to Environment Agency)	1994 - 1998

PROFESSIONAL EXPERIENCE

2024

Expert Witness
Confidential legal advisor: Expert witness, waste treatment procurement dispute

Phil is providing opinion concerning the rationale for the outcome of a procurement process for a local authority residual waste treatment and recovery contract. Phil is advising the solicitor for the previous incumbent supplier who is challenging the decision to award the contract to a competitor. Phil is included in a confidentiality ring to review the solution and performance of the successful bidder to assess whether there is evidence that party misled the procuring authority in terms of its ability to meet the contract requirements.

Regulatory Advisor
United Utilities: End of waste, biopolymers recovered from sewage sludge

United Utilities (through Ofwat innovation funding) is exploring the potential to recover various biopolymers from wastewater treatment and to demonstrate their application in a range of uses. Phil is advising the project team in relation to the definition of waste, waste classification, and end of waste to develop a position on the potential to treat sludge and recover biopolymers to the point that they can cease to be classified as waste.

Expert Witness
JMW Solicitors: Expert witness, rationale for termination of waste export contract

Opinion relating to the quality of refuse derived fuel (RDF) bales manufactured for overseas energy recovery. Client is the legal advisor to a waste management company that is claiming for wrongful contract termination by the company responsible for the transport, shipping, and energy recovery of RDF on the grounds of poor bale quality. Phil gave evidence at the High Court of Justice, Business and Property Courts, Manchester, June 2024. In his Judgment, His Honour Judge Hodge KC commented the Phil was "*appropriately qualified and experienced to opine on these matters... excellent, and reliable*". Outcome in favour of the Claimant.

Regulatory Advisor
Confidential pharmaceutical sector client: Waste classification advice for medical devices

Phil prepared a position paper on the appropriate classification of used medical devices arising from European clinical trials. The client had received inconsistent opinion from regulators and third parties and sought opinion to share with regulators to seek a common understanding to facilitate waste exports. Phil considered the

properties of the device and its components, including WEEE, potential infectious hazard, and drug residues. Retained to facilitate discussions with regulators in 10 European countries.

Regulatory Advisor
Confidential manufacturing sector client: End of waste, paper pulp

Phil is advising (since 2022) a subsidiary of a large US paper manufacturer on its strategy and submission to seek opinion from the Environment Agency on the 'end of waste' status for recovered cellulose fibre. Fibre to be recovered from mixed municipal and commercial waste using a patented technology to create pulp as raw material for paper manufacturing. The outcome informs the client's decision for UK investment in the process.

Technical Advisor
London Luton Airport Operations Limited (LLAOL): Waste & Recycling Contractor Appraisal

Phil is Project Director reviewing LLAOL's contract with its primary waste management contractor and the contractor's compliance with KPIs and legal requirements. WSP will review data on tonnages and destinations of all waste streams, waste management and segregation at the airport, and audit the contractor's MRF process operations, outputs, and regulatory compliance, including domestic and export documents.

2023

Commercial Due Diligence Lead
Confidential investor: Market assessment, waste synthetic plastic fishing nets

Phil led due diligence on behalf of the investment arm of a large plastic toys manufacturer. Assessment of the arisings and availability of synthetic plastic fishing nets to diligence the assessment of the vendor, an established European recycler of synthetic plastic fishing nets into pellets.

Commercial Due Diligence Lead
Confidential investor: Acquisition of liquid organic waste management company

Phil led due diligence for an investor with an established anaerobic digestion (AD) portfolio that sought to acquire a liquid organic waste management company as part of a strategy to secure feedstock. The target company had a large tanker fleet, liquid waste storage infrastructure, and land spreading equipment and deployments (land bank). Phil led on regulatory due diligence of land spreading and depot operations.

Expert Opinion
Knights Plc on behalf of QBE Insurance: Expert opinion, duty of care

Opinion in relation to an Environment Agency prosecution. Multiple defendants including operator, landowner, and waste carriers. Phil provided opinion in relation to what actions were reasonable for a broker (joint defendant) to undertake in relation to its role in the chain of custody and relating to the duty of care Statutory Code of Practice.

Expert Witness
Shoosmiths (Northern Ireland) Ltd: Expert witness, energy from waste process

Phil was instructed to advise on the design intent and capabilities of a proposed 'multi-fuel' energy from waste combustion facility in terms of material capable of being treated. Advice related to an application by a waste management company (Shoosmiths' client) for judicial review of a planning decision by Mid and East Antrim BC. Phil reviewed Affidavits and supporting evidence and prepared an Affidavit.

Regulatory Advisor
Confidential manufacturing sector client: Advice on illegal waste disposal

Phil advised a company that bought land, which it was subsequently informed had been subject to large-scale illegal tipping and was under investigation. Advice on liability, what the conveyancing and consultation process should have identified, and the regulator's approach to sharing information, and liaised with the regulator.

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Commercial Due Diligence Lead
Confidential investor: Energy from waste scheme acquisition

Phil led a team advising a US investor in its potential acquisition of a UK EfW scheme at the development stage. Advice on current and future UK and regional waste market (projected waste feedstock availability), competing local development schemes and their likelihood of successfully progressing to operations.

2022

Regulatory Advisor
Knights Plc: Advice on export of paper waste

Phil provided (pre-enforcement) opinion in relation to the quality of paper prepared by a large-scale materials recycling facility (MRF) that was intended to be exported for recycling. Phil reviewed evidence and provided opinion on the recycling process and advice on provisional defence arguments.

Expert Opinion
Penningtons Manches Cooper LLP: Expert opinion, adequacy of land reinstatement

Phil advised a landowner that had leased agricultural land to a local authority, whose main contractor was required to reinstate it after use as a construction compound. Opinion on alleged land contamination and potential remediation or reinstatement to restore land to agricultural use without any monitoring needs.

Commercial Due Diligence Lead
Confidential investor: Energy from waste portfolio investment

Phil led a team advising a European investor in a potential acquisition of a shareholding in a portfolio of UK EfW assets. Assessed data room and management information and advised on the current and future UK waste market and dynamics in the catchments of four large-scale EfW facilities. Phil reviewed fuel supply contracts, potential future risks & opportunities, and led phase 1 and 2 diligence.

Regulatory Advisor
Burges Salmon LLP: Illegal waste disposal and site clearance

Phil advised a private landowner following their discovery of significant illegal deposits of mixed waste following purchase of a site. Phil advised on the nature of the waste then facilitated discussions with the regulator on clearance solutions. Retained to advise on compliance aspects of clearance contractor solutions.

2021

Commercial Due Diligence Advisor
Confidential investor: Energy from waste company acquisition

Phil was part of a team advising on a potential investment in a tier-1 UK waste company. Reviewed data room documents to identify red flags, including aggressive business case assumptions for collection contracts and facility performance, and provided ‘outside-in’ review of market risks. Advised on the UK waste value chain and opportunities for additional revenue generation beyond the business plan projections.

Expert Witness
Confidential legal advisor: Clearance of waste from a damaged container vessel (Tribunal)

Phil provided opinion to the charterers of a ship that suffered a fire and the loss of much of its cargo. Opinion on the owner’s actions and delays to return the vessel to service concerning how it managed c. 60,000t of solid waste, sludge & contaminated water arising, and the appropriate process to procure waste services and classify and export waste. Cross-examined at Tribunal hearing.

2020

Expert Opinion
Eversheds Sutherland: Alleged illegal waste disposal

Phil advised in an Environment Agency prosecution of a metal waste treatment company alleged to have caused illegal deposit of waste. Advised on classification of waste described as trommel fines and deposited under a waste recovery plan as soil substitute and the responsibilities of company, broker and landfill operator.

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Expert Witness
Confidential legal advisor: Libel claim

Phil was instructed in relation to a High Court libel claim. The BBC was alleged to have defamed the Plaintiff, alleging involvement in illegal rubber waste export. Phil advised on applicable export controls for the waste, correctly classified, and was able to support the BBC's case.

Technical Advisor
NEOM: Waste treatment technology options long-listing for proposed development

Phil undertook a detailed assessment of proven & innovative technologies to process recyclables (reprocessing & remanufacturing) and a comprehensive range of hazardous wastes to best progress circular economy objectives. Informed selection of technologies to treat waste with a vision to provide sustainable living for a 1M population.

Technical Advisor
States of Jersey Government: Recovery of incinerator bottom ash (IBA)

Phil assessed beneficial uses of IBA to divert it from landfill. Led options analysis; commercial & regulatory review (including end of waste status); local & EU market assessment; and Capex analysis. Retained to lead export & recovery procurement (specifications, contracts), classification and export regulatory advice until service start. IBA classification advice and contract monitoring to 2020. Wrote the Ash Management Strategy.

Technical Advisor / Expert Witness
Essex County Council / Slaughter and May: Mechanical biological treatment performance dispute
Phil directed a team assessing reasons for failure to pass Acceptance Tests, whether due to waste composition (the contractor's position) or facility design. MBT was part of an £800M, 25-year PFI. The team advised on potential performance remediation measures & advised ECC during commissioning. Assessed on-site quarterly composition analysis by the contractor's advisor for c.4 years until 2020. Technology & Construction Court judgement found in favour of ECC.

Commercial Due Diligence Advisor
Confidential Investor: Sell side due diligence, anaerobic digestion (AD)

Phil directed market due diligence for a large commercial food waste AD facility. Included feedstock availability assessment within a defined catchment and feedstock pricing under a range of scenarios for financial model assumptions. Retained to input to Information Memorandum and clarifications. Sale proceeded.

Regulatory Advisor
Environmental Protection Agency, Ireland: End of waste regulatory guidance & good practice

Phil wrote comprehensive guidance to facilitate quality end of waste applications from industry in Ireland to support efficient and robust regulatory decisions. Outputs also included web content, a template end of waste application and a review of end of waste work at a European level and national level across all EU countries.

Commercial Due Diligence Advisor
Bio Capital: Buy side due diligence, anaerobic digestion (AD)

Phil directed market due diligence for four operating food and agricultural waste AD assets. Included waste supply projections and supply-demand scenario analysis; policy impact assessment on waste availability; review of local authority organic waste contract expiry dates; gate fee assessment; process capacity review (assets acquired).

2019

Expert Witness
CMS Cameron McKenna Nabarro Olswang LLP: Export of waste

Phil was instructed in an Environment Agency prosecution of a tier 1 UK waste company alleged to have exported paper that was too contaminated to be shipped legally. The waste came from one of the UK's largest

materials recovery facilities (MRFs). Phil commented on the MRF's capability, contamination, and guidance and contracts referring to levels of allowable non-target waste. Phil gave evidence in Crown Court, June 2019.

Regulatory Advisor
Burges Salmon LLP: End of waste application

Phil provided technical and regulatory advice to a US solid fuel producer seeking an end of waste position for solid recovered fuel (SRF) pellets for use in the UK power sector. Phil represented the client at a meeting with its legal advisor and the EA to determine the potential approach to end of waste.

Project Monitor / Commercial Due Diligence Advisor
Department for Transport (DfT): Future Fuels for Freight & Flight (F4C) Programme

As part of a wider programme of support to evaluate and monitor schemes seeking funding, Phil advised applicants as commercial project monitor and reported findings to DfT. Commercial evaluation of schemes proposing advanced conversion technologies to prepare liquid fuels from waste or biomass feedstocks.

Expert Witness
Ellis Jones Solicitors LLP: Waste treatment contract dispute

Phil provided opinion on whether the rationale to cancel a long-term contract to accept and treat residual waste was reasonable. Commented on regulatory framework (including waste classification and duty of care); contentions advanced by both parties relating to odour; and adequacy of waste treatment equipment. Settled.

Expert Witness
Mayer Brown International LLP: Gasification facility performance

Phil directed and reviewed opinion on multiple issues at two large UK waste sites where aspects of the developments did not achieve required performance. The client was legal representative of the insurer. Opinion focused on failures in gasification technology performance, delivery to schedule and system design.

Expert Witness
Darrois Villey Maillot Brochier (France): Waste to energy contract termination

Phil led a team of experts providing opinion for arbitration proceedings in the International Court of Arbitration of the International Chamber of Commerce. The dispute related to the validity of the rationale to terminate a waste disposal contract and proposed waste to energy facility, specifically whether the EIA was complete and met all requirements and if the proposed technology met BAT (Best Available Techniques) requirements.

2018

Expert Opinion
Dentons: Infrastructure development dispute

Phil led a team of experts opining on why a developer failed to take up options to develop 3 gasification facilities. Assessed performance and deliverability of the proposed technology; planning & permitting status; viability of grid connections; ability to finance the schemes; and renewable energy incentive deadlines. Settled.

Expert Witness
Mayer Brown International LLP: Mechanical biological treatment (MBT) AD facility insurance claims

Phil directed expert opinion on the design and performance of several PFI MBT-AD's where expected performance was not achieved. Verified insurance claims by assessing causation as design, construction, operations or other. Phil provided technical support and quality review to 4 in-house experts on specific aspects of the claims (2012-18).

Technical and Commercial Due Diligence Advisor
Confidential investor: Cory Riverside energy from waste, acquisition

Phil directed due diligence for a potential acquisition. Assets included conventional energy from waste, materials recovery and waste transfer facilities. Red Flag review and multi-advisor workshop with focus on principal risks and likelihood for successful exploitation of proposed development opportunities.

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Technical Due Diligence Advisor
Welsh Water Infrastructure Limited: Acquisition, anaerobic digestion asset

Phil directed an assessment of a food waste AD and a co-located open air windrow composting facility. The suitability of the assets was assessed via site visits, review of data room documents, and reference plant performance (AD pre-treatment & treatment technology). Facility acquired.

Commercial and Regulatory Advisor
Confidential food supplements manufacturer: Review of waste recovery markets

The client aimed to move management of a calcium sulphate-rich filter cake up the waste hierarchy (disposal to recovery). Phil assessed potential uses in land restoration, agriculture, and construction products, identified potential off-takers, and assessed end of waste. Retained to assess similar for a precursor acid waste stream.

2012-2017

Expert Witness
Preston Redman LLP: Alleged breach Environmental Permitting Regulations (EPR 2010)

Phil was instructed in relation to an alleged illegal operation involving utility trench excavation waste. Assessed if operations met the terms of registered exemptions; regulator's assessment of waste quantity & quality; and potential risk to health or the environment. Prosecution accepted a Civil Sanction (Enforcement Undertaking).

Regulatory Advisor
Panda Group / New Earth Solutions: 'Problematic waste stream' submission

Following a fire at a permitted waste treatment facility, Phil negotiated a PWS position between the Environment Agency and a third-party landfill operator for the client. Assessed waste involved (contaminated to the extent that it was hazardous). The parties accepted a PWS as a one-off solution outside the landfill waste acceptance criteria.

Lender's Technical Advisor
RBS Plc: Anaerobic digestion (AD) asset portfolio (Tamar Energy Limited)

Phil directed this role to regularly monitor management and operations of the portfolio and report findings to the Lender over a 7-year finance facility (ceased after acquisition). Monitored performance of each SPV against financial model assumptions, operational, safety, environmental, waste supply & management issues.

Expert Witness
Andrew Jay & Co Solicitors: Alleged Packaging Recovery Note (PRN) fraud

Phil opined on charges against a former glass re-processor accredited to issue PRNs. Reviewed glass quantity and quality in a large stockpile. Led discussions with Regulator on evidence and the level of reprocessing, on which the trade in PRNs depends, and alleged PRN market distortion. EA withdrew fraud charges due to disclosure issues.

Regulatory Advisor
Arden Wood Shavings Limited: End of waste submission, animal bedding from Grade A wood waste

Phil peer reviewed a draft case & legal opinion for an end of waste submission and provided recommendations. Retained to prepare a full submission, including to audit waste wood suppliers; assess treatment process against best practice; sample and characterise fully processed waste wood in line with best practice; review client specifications; review product performance, including for animal health. Ceased on client acquisition by Veolia.

Expert witness
Beale & Company Solicitors LLP / Sheridan Gold LLP (for BAM Nuttall): Mechanical biological treatment (MBT) construction contract dispute

Phil was instructed to prepare expert evidence on MBT (with in-vessel composting) design and performance and linkage with contract waste composition. Reviewed reasons for failure to pass reliability tests and potential modifications to address Scott Schedule items at the Cambridgeshire PFI facility. Following settlement,

advised on insurance & contractor claims (successful adjudication). Commended by Counsel (Keating Chambers) on reports.

Expert Witness
Stephensons Solicitors LLP: Alleged illegal export of glass waste

Phil provided opinion on alleged illegal export of glass waste and PRN fraud. Phil visited and assessed the destination glass reprocessor (Ireland). Counsel (St Pauls Chambers, Leeds) commented that Phil's expert report led to the prosecution withdrawing the substantial TFS charges.

Expert Witness
Grech Gooden Solicitors: Waste clearance costs, Proceeds of Crime Act (POCA)

Phil provided opinion relating to a waste transfer station operator convicted under EPA and EPR to determine site clearance costs. Quantitative & qualitative assessment of waste stockpiles; review potential recovery markets; review costs to manage waste including landfill tax at time of the indictment; critique EA assessment.

Commercial Due Diligence
Finance Wales: Glass recycling company investment

Phil undertook market due diligence for a proposed glass recycling company investment. Assessed feedstock & recyclate markets, contracts and competitors, and reviewed equipment specifications and performance guarantees. Due diligence of the potential to recycle glass in a significant and aged on-site stockpile.

Regulatory Advisor
Equestrian Surfaces Ltd (via WRAP): End of waste submission

Phil prepared the case, including assessing characteristics of input wastes (carpets and other textiles); end-product specifications and market; comparator materials (waste derived wood chip & tyre rubber); and human health and environmental risks under realistic exposure scenarios. Achieved positive EA end of waste opinion.

Project Monitor
WRAP Cymru (Waste & Resources Action Programme): Recycling facility project monitoring

Phil led a 3-year programme to monitor and verify the compliance of 'Accelerating Reprocessing Infrastructure Development' (ARID) grant recipients against support agreements during build & operations phases. Managed a team of monitors, provided technical advice & monitored recycling & carbon benefits over numerous sites.

Technical Advisor
Skanska-Cory SPV: Residual waste procurement advisor, Essex Waste Partnership

Phil led procurement technical advice in a competitive dialogue process. Included waste flow and carbon impact modelling; composition risk assessment; technical due diligence of proposed MBT-AD technology; advice on accessing product end markets; and performance risk review. Client withdrew from process.

Project Monitor
WRAP (Waste & Resources Action Programme): Organic waste treatment facility project monitoring

Phil managed compliance monitoring of several in-vessel composting and AD projects against their support agreements (2009-11). He previously supported 24 compost producers to achieve process & compost product quality assurance under PAS100 (2007-09), working as an Association for Organics Recycling (AfOR) and subsequently Renewable Energy Association Organics Recycling Group (REA ORG), approved consultant.

Technical Advisor
Environment Agency & WRAP: End-of-Waste Quality Protocols (QP) Programme

From 2007 to 2011, Phil was seconded for several periods as lead technical advisor to develop end of waste criteria (regulatory positions) for a range of wastes to enable their beneficial recovery. He led technical work to develop QPs including waste wood, incinerator bottom ash, steel slag, tyre rubber crumb, biodiesel from used cooking oil, and flat glass cullet. QPs define the requirements to enable wastes to be reclassified as products. Phil also advised on complex technical and definition of waste issues.