

We help organisations across the world prepare, protect and maintain their key assets.

Our technology and expertise safeguards critical infrastructure, and our consultative approach protects their operations from the risks posed by environmental uncertainty, regulatory change and technical disruption.

Our customers operate with confidence, knowing that if the unforeseen happens, we will respond, the environment is protected, and their business is resilient.





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About Adler & Allan



With nationwide coverage, class-leading capabilities, and a range of innovative technologies, we are relied upon to deliver compliance and resilience solutions for large organisations and SME's in over 50 UK industries.

We have an excellent compliance record in every industry we operate in and are trusted to provide maintenance for over 10,000 UK assets, more than 100m litres of fuel storage and resilience engineering solutions to companies in the UK and overseas, protecting and improving the value and longevity of their assets.

Adler & Allan is a 24/7/365 emergency response, oil and environmental services specialist that provides clean-up, mitigation and land remediation services in response to pollution incidents such as tanker spills and major flooding incidents. We use the specialist knowledge we've

gained from incident management and our growing portfolio of product innovations to provide environmental and asset resilience services to help prevent incidents, increase resilience and ensure compliance. As a major player in the UK and working in 22 countries around the world, we are unique in offering both operational capability and consultancy expertise in range and depth. Our strategy is underpinned by the ongoing broadening of our service offering, forming strategic, long-term partnerships with our customers to deliver an increasingly multidisciplinary range of services across the full life cycle of their assets.



We help businesses large and small; including utilities, facilities management companies, major supermarket chains and leading oil distributors; the Defence sector, local authorities and some of the UK's most important infrastructure assets, protect and plan for environmental incidents, while keeping essential fuel in top condition, maintained correctly and transported to where it needs to be.

Asset Resilience

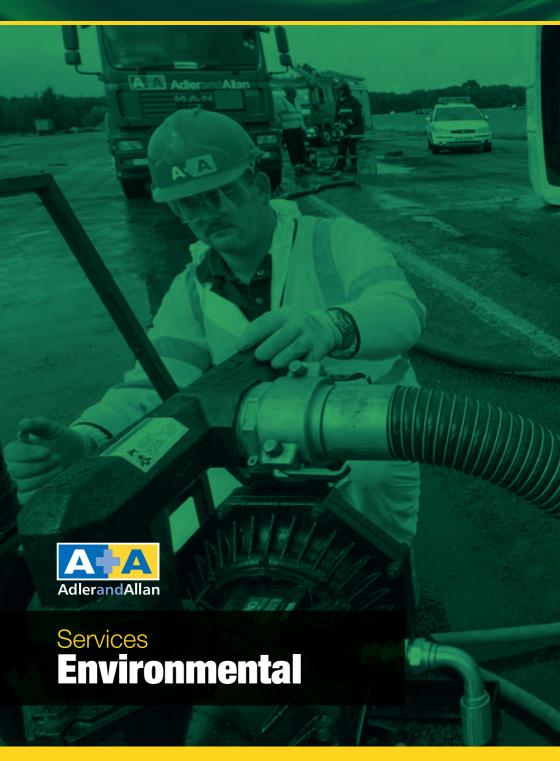
This is now more important than ever with unpredictable environmental conditions, tighter regulatory and compliance requirements, and increased budgetary demands mean protecting UK infrastructure assets from deterioration, degradation, and other damages is critical. Over the last 5 years we have researched and developed specialist Asset Resilience Solutions for critical infrastructure such as sub-stations and

storage tanks, to significantly extend the life of assets, protect them from floods and other environmental risks, and lower Total Cost of Ownership and the costs of maintenance.

R&D

We have placed significant R&D investment into specialist asset protective coatings and patented flood mitigation technologies to provide a highly effective combination of environmental protection and flood resilience solutions. In addition, we have launched award-winning filtration products for spill response incidents and the forecourt fuel distribution sectors as well as transformative coatings to extend asset life.

"As a major player in the UK and working in 22 countries around the world, we are unique in offering both operational capability and consultancy expertise in range and depth."





Spill Response

Whether dealing with oil, chemicals or other hazardous materials, as the UK's leading spill responder, Adler & Allan is perfectly placed to tackle every emergency; from minor spill to major industrial disaster. We provide rapid response and expert analysis, on call 24/7, 365 days a year from a national network of centres.

- 24/7, 365 days a year emergency spill response
- · Highly trained teams equipped with latest spill clean-up technology
- Spill response for marine, ground and fresh water, plus land remediation projects
- Environmental site investigation, including sampling and analysis
- UK Spill Association member

Case study > Spill Response

Marine Oil Spill

The Project

The lids of a Heavy Fuel Oil (HFO) tank of a large container ship were not secured properly resulting in a large spill, in excess of 100 tonnes, from the cargo bay at sea. Not only was this causing a potential pollution issue, the ship was losing substantial amounts of money by missing a slot at its next port of call.

The Solution

Adler & Allan's team of spill technicians attended the area with Artic ADR tankers, Jet-Vacs and DISAB vehicle to uplift the fuel – specialist vehicles were craned into the cargo hold in order to carry out the works. A&A worked 24/7 to clean up the fuel and get the ship back en route to its destination.



The Outcome

The ship and its containers were all cleaned, marine pollution was avoided and because Adler & Allan worked around the clock, downtime impact was significantly reduced, preventing further loss of revenue.





Chemical Response

Adler & Allan is the only UK company to provide a total chemical spill solution – 24/7 emergency response and subsequent clean-up to any scale of incident. Using the latest technologies, our national network can mobilise immediately in the

event of a spill, providing initial response, site decontamination and the treatment and removal of hazardous substances.



- 24/7, 365 days a year emergency chemical spill response
- From small-scale battery acid to bromine and gas leaks
- · Experts in hazmat and corrosives
- Members of the European Chemical Response Alliance (ECRA)
- · Waste removal and in-house fleet tankering capability



Disaster Response

The Group has the experience and resources to tackle the most serious environmental disasters. With a nationwide network of bases, teams and equipment, we respond quickly and effectively to limit damage, prevent pollution and assist

recovery. Covering oil and chemical spillages, firewater containment, flood relief and critical power shortages, disaster response is available 24/7, 365 days a year.

- · Quick, efficient response to limit damage and prevent pollution
- · Oil and chemical spill response
- Firewater containment
- Flood relief and critical power shortages
- Emergency fuel delivery



Flood Response and Clean-up

Adler & Allan's flooding specialists are available nationwide, delivering 24/7 emergency response and post incident clean-up. Flood response teams and associated equipment; such as flood barriers, pumps and temporary storage tanks; can be onsite within a few hours. To help businesses and communities be

aware of impending flooding and react swiftly, Adler & Allan provides a Flood Warning Alert System. Flood readiness training and site flood prevention services, including flood equipment inspection and maintenance, help to minimise damage and ensure an effective response.

- 24/7 emergency response, available nationwide
- · Dedicated flood response teams and equipment
- · Site flood prevention services and training
- Flood equipment inspection and maintenance
- · Flood Warning Alert System
- · Clean-up and sanitisation



Marine Protection and Response

We provide accredited Tier 2 pollution response services to most of the UK's ports and harbours, plus a number of oil terminals, from our network of UK bases. Using expert teams and specialist

equipment, we deliver oil spill clean-up for ports, harbours and coastlines, plus spill training and marine spill response consultancy.

- Oil spill clean-up for ports, harbours and coastlines
- · Specialist equipment, including harbour booms, storage tanks and spill kits
- Spill training
- Marine spill response consultancy
- · Accredited by the Nautical Institute



Oxygen Depletion Response

Oxygen depletion in lakes, rivers and ponds caused by pollution events and/ or drought, can damage eco-systems, killing fish and other living organisms. Our oxygen depletion services, through

aeration or by the addition of hydrogen peroxide, will quickly bring water backup to habitable levels, with emergency response available 24/7, 365 days a year.

- 24/7, 365 days a year emergency response service
- · On-site assessment
- Qualified operatives to deliver mechanical aeration or hydrogen peroxide treatment
- ADR Drivers to deliver hydrogen peroxide
- · Water test kits and quality meters



Spill Kits and Equipment

We supply a comprehensive range of spill kits to deal with hazardous spills, including oil and chemicals. Acting quickly in the event of a spill will reduce clean-up costs, prevent legal action and minimise environmental damage. The right spill care kits and other treatments are essential for ISO 14001 compliance.

- · Spill kits for oils, fuels, solvents, chemicals, aqueous and organic liquids
- · Absorbents for mopping oil and chemical spills
- · Storage and drainage
- · Specific equipment and training for marine spills
- SockIt filtration to prevent water contamination



Spill Training

Adler & Allan is one of the leading spill training companies in the UK. With considerable expertise in spill response, we can help companies prepare for and deal with disaster, in order to minimise

damage to the environment and their business' reputation. Training is tailored to suit, covering land, watercourses and the marine-based spills.

- Prepare for and deal with spill-based incidents
- Minimise damage to the environment and a business' reputation
- · Land, watercourses and marine-based spills
- · Covering oil and chemical spills



Environmental > Contaminated Land and Remediation

Contaminated Land Investigation and Risk Assessment

The Group's contaminated land investigation and risk assessment services are designed to minimise pollution and liabilities. Investigated by an experienced environmental consultant, Adler & Allan provide Preliminary and Quantitative Risk

Assessments, covering the identification of contamination causes and its dangers to human health, soil and groundwater, in order to design and implement a remediation strategy.

- Environment Agency approved supplier
- Preliminary and Quantitative Risk Assessments
- Team of experienced environmental consultants
- · Minimise pollution and liabilities
- Soil and groundwater remediation strategy following investigation



Environmental > Contaminated Land and Remediation

Post Spill and Remediation

Following a spill, we provide ground and watercourse remediation, including post-spill clean-up and assessment, options appraisal and subsequent remediation. Our in-house remediation techniques include the excavation and removal of

contaminated soil, biological and chemical treatments. We also represent clients in meetings with the Environment Agency and Local Authorities.

- · Post spill clean-up and assessment
- · Options appraisal
- Physical remediation, including removal of contaminated soil
- · Biological and chemical remediation
- Client representation in Environment Agency and Local Authority meetings
- · Minimises pollution and liabilities



Environmental > Contaminated Land and Remediation

Environmental Monitoring

The Group's team of dedicated environmental technicians carry out groundwater and surface water monitoring works using leading edge equipment and specially adapted 4WD vehicles. We offer 'low flow' sampling to depths of 150m

below ground level, product recovery trials and aquifer testing services, including slug testing, falling and rising head tests and aquifer pumping tests. All results and data can be interpreted by our in-house team.

- Groundwater and surface water monitoring
- 'Low-flow' sampling to 150m below ground level
- · Aquifer testing capabilities
- In-house hydrogeologists for data interpretation
- Specialist equipment and adapted 4WD vehicles

Case study > Contaminated Land and Remediation

Contaminated Land

The Project

A leaking fuel line beneath a petrol station forecourt resulted in 1,000 litres of petrol contaminating groundwater and emerging into an adjacent river.

Following clean-up of the river, remediation of the groundwater was required to mitigate the residual risks to the watercourse.

The Solution

Ground investigation work had been undertaken prior to Adler & Allan's involvement, the results of which had been used to generate some stringent remedial targets, resulting in an estimated remediation cost of £140k.

Adler & Allan staff were engaged to assess the remedial targets and the proposed solution to determine whether an alternative solution could be found.

Additional ground investigation, risk assessment and monitoring were

undertaken, which demonstrated that risks to the nearby river were negligible and led to successful re-evaluation of the remedial taraets.

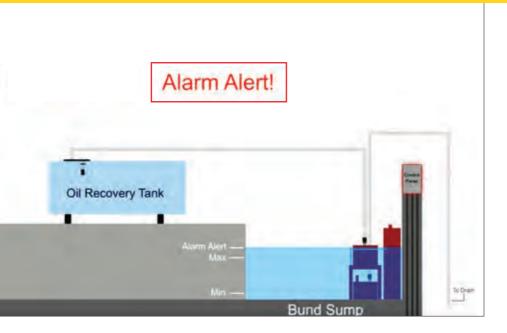
A free product recovery system was installed and operated for a period of ten months, with a further month of rebound trials. Adler & Allan was able to agree completion ahead of schedule and with a significant cost saving. Post-completion monitoring verified the Conceptual Site Model and Risk Assessment.

The Outcome

A verification report was issued in Spring 2010 demonstrating completion of the works to our client's satisfaction.

A Remediation Statement was subsequently submitted and approved by regulators.





Bund Water Control Installation and Servicing

We supply, install, commission and service Bund Water Control Systems, used to monitor bund capacity. Works include fitting external wall control panels in the optimum location, the assembly of

probes/pumps within the bund sump and discharge pipework to the outfall drainage, plus servicing of all elements to ensure ISO 14001 compliance.

- · Supply, installation, commissioning and servicing
- · Optimum positioning of control panelling
- Probe/pump assembly
- · Discharge pipework assembly

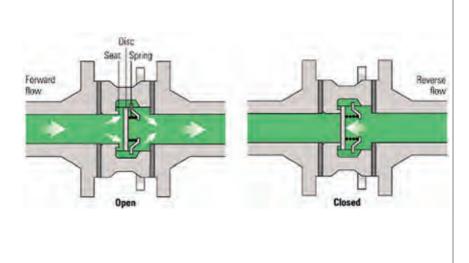


BoxSep® Pollution Control System

Adler & Allan's new BoxSep gives all the features of a normal separator, but works in areas where space is restricted. BoxSep

can be used where there is a risk of ground contamination and site space will not allow for a standard separator installation.

- The BoxSep prevents hazardous oil pollution working in conjunction with a bund water control unit (BWCU).
- Easy install being deployed above ground, lightweight and easy to transport/carry to site for installation by our experts.
- Works in conjunction with the bund water control system which incorporates high oil probe to detect oil allowing the system to be isolated.
- Used in conjunction with A&A's JBAR™ Flood Mitigation System to produce a self-contained flood defence and spill containment solution.
- Does not require extensive underground civil engineering; works as a normal separator.
- The additional baffle allows low level outlet applications (majority of the application will be discharged directly into the ground).



Check Valve Installation and Servicing

We supply, install, commission and service check valves, essential for stopping pollutants being released into the surrounding environment. Works include civil operations and installation of the

check valve to the outfall location in order to create a positive seal. Check valves are activated by hand, environmental probes, or wireless monitor. The system can also be internet linked allowing full control.

- · Supply, installation, commissioning and servicing
- · Civil operations
- Hand, probe or wireless activation
- · Internet linking available for full control



Environmental Plant Services

Adler & Allan's environmental plant maintenance services will assist in keeping pollution prevention measures, such as separators, in working order. By ensuring essential equipment works properly,

businesses avoid the risk of fines and damaged reputations, while protecting the environment and reducing waste management costs.

- Separator maintenance
- Safeguard the environment and meet regulatory demands
- · Reduce the risks of fines and damaged reputations
- · Reduce waste management costs
- Contributes to ISO 14001 accreditation



Ethanol Coalescing Filter®

All businesses that use forecourts have to deal with hydrocarbon polluted water discharged from on-site separators, which potentially releases harmful BTEX compounds into the environment. Adler & Allan's award winning Ethanol Coalescing

Filter, simply attached to existing separators, removes over 90 per cent of these compounds, helping organisations meet stringent Environment Agency pollution guidelines.

- Over 90 percent of harmful BTEX compounds removed
- · Simply and easily fitted to existing separators
- · Helps organisations meet Environment Agency pollution guidelines
- Can be delivered alongside a complete forecourt solution service package



Remote Systems Monitoring

Remote systems monitoring is an essential early warning tool to prevent environmental spills and flooding. Adler & Allan installs and maintains alarms and other remote monitoring equipment, with online

monitoring available through a Telemetry system available 24/7, 365 days a year. Our separator alarm service package complies with European Standards.

- Installation and maintenance of remote monitoring equipment and alarms
- Service package that complies with European Standards
- Telemetry system for quick and easy control of remote monitoring and alarming equipment
- Online monitoring 24/7, 365 days a year



Separator Alarms and Monitoring

Separator alarms alert overflow, helping to reduce waste management costs and stop flooding and pollution incidents. Our team of experts can specify, supply, install and service oil separator alarm systems to the

most stringent standards. We also supply regular separator maintenance contracts to keep pollution prevention equipment working at optimum efficiency.

- · Reduce waste management costs
- · Avoid overflow, flooding and pollution
- Expert team to specify, install and service separator alarms
- Regular separator maintenance contracts



Separator PPM, Servicing and Audits

Adler & Allan is the UK's leading separator servicing and maintenance provider. Our separator services are essential for businesses that handle or store fuel and other hazardous substances; to prevent pollution, flooding and fines.

We can provide regular Planned Preventative Maintenance (PPM) and servicing to ensure separators are working as they should be, necessary for meeting the requirements of legislation such as PPG3 and EN858-2. As part of this process, Adler & Allan will clean separators and associated filters, removing the silt and sludge that can cause blockages and lead to pollution.

For installations where there is insufficient information regarding the condition and functionality of a separator, Adler & Allan provides auditing; the first step for clients interested in entering a separator servicing contract.

- UK's leading separator servicing and maintenance provider
- Compliance with legislation such as PPG3 and EN858-2
- · Ongoing PPM and cleaning contracts available
- · High profile clients, including the Environment Agency and National Grid
- Auditing to determine separator condition and functionality



Separator Supply and Installation

We are one of the country's leading separator installation companies, specifying, installing, and maintaining standard or bespoke oil separators, including full retention and forecourt separators. Essential for pollution prevention, we install separators on forecourts, car parks and hauliers' yards, with clients including the Environment Agency and National Grid.

- Standard or bespoke oil separators
- · Full retention and forecourt separators
- · Ongoing maintenance contracts
- · Separator System Audits
- High-profile clients, including the Environment Agency and National Grid
- We also source separators from the leading manufacturers



SockIt Filtration System

Adler & Allan's award-winning Socklt Filtration System is suitable for a wide range of de-watering applications, removing hydrocarbons and suspended solids from water. Socklt eliminates the cost of taking contaminated water off site for processing and prevents pollution. Each sock can filter 10-20 litres of oil, with 99% efficiency in removing fine particles.

- Suitable for a wide range of de-watering applications
- No need to take contaminated water off-site for processing
- · Prevents pollution
- Each sock can filter 10-20 litres of oil
- 99% efficient in removing fine particles



Treatment Plant Servicing

We provide specialist auditing services for pumping stations and sewage plant maintenance. Supporting customers in both emergencies and during planned servicing, we can provide a range of auditing services, including the installation of a Bund Water Control Unit to maintain bund capacity, and Pipeline Investigation Gauge (PIG) cleaning and inspection, used for hydrocarbon pipelines.

- · Supporting customers in emergencies and during planned servicing
- Installation of Bund Water Control Units to maintain bund capacity
- Pipeline Investigation Gauge (PIG) cleaning and inspection



CCTV Surveys

CCTV surveys for small diameter surface and foul drains up to large-scale drainage and pipe analysis, with fully detailed and compliant paper and video reporting. Using a portable and flexible push-rod unit or van fitted with an ATEX Zone 2 Nitrogen purged rated camera inspection system, CCTV surveys are ideal for petrol forecourts and other hazardous environments.

- Paper and video footage reporting
- · Latest technology push-rod CCTV system
- Van fitted with multi-terrain Proteus 360 camera
- Suitable for drainage surveys large and small
- · Supported by JetVac combination tanker



Drainage Services

Adler & Allan offers a complete drainage solution – from CCTV surveys and reporting, to essential maintenance and repair; such as unblocking waste pipes, installing, cleaning and servicing

separators and pumps. We can provide foul drainage jetting, sewage treatment plant installation, PPG compliance surveys and all associated civil works.

- Total drainage solution, from installation to maintenance
- CCTV surveys and reporting using push-rods and van
- All works compliant with PPG3 regulations
- · Separator cleaning and foul drainage jetting
- Sewage treatment plant services



Fly-Tipping

Fly-tipping, a commonly used term for rubbish that is illegally dumped on land without permission, is a real problem for landowners. Adler & Allan is fully licenced to clear and dispose of commercial and

industrial waste left by fly tippers in accordance with the hazardous waste regulations, minimising disruption and environmental risk.

- Fully licensed to clear commercial and industrial waste
- All works completed in accordance with legislation
- Quick and efficient to minimise disruption and environmental risk

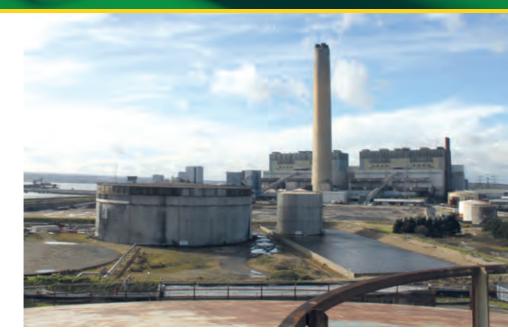


High Pressure Industrial Water Jetting

Using specialist high-pressure jetting and suction equipment, we provide efficient drain and sewer cleaning and maintenance. In addition, our water jetting services can be utilised for a range of

surface cleaning projects, including car parks, airport runways, bridges, buildings and retaining walls. The latest recycling technology ensures water usage and waste generation is minimised.

- Specialist high-pressure jetting and suction equipment
- Latest recycling technology to cut water usage and waste generation
- Water jetting for a range of surface cleaning projects
- Mobile screening units to reduce the amount of waste removed from a site



Process Plant Decommissioning

Fossil fuel power plants are being decommissioned as we move towards greener alternatives. Adler & Allan can shut these sites down safely and recover oil or fuel using Enhanced Oil Recovery (EOR) techniques, with minimal harm

to the surrounding environment. Our Power Plant Decommissioning services include industrial plant removal, hazardous waste management, decontamination and site remediation.

- Enhanced Oil Recovery (EOR)
- Industrial and heavy plant removal
- · Fuel tank decommissioning
- · Hazardous waste management
- Site decontamination and remediation



Site Clean-up and Plant Removal

The Group's Site Clean-Up and Plant Removal services comply with current regulation to ensure a site is safe and clean, with minimal risk to the environment. We can decommission, remove and dispose of heavy plant or machinery units and any remaining waste, plus provide decontamination, remediation and Environmental Site Compliance Audits.

- Compliance with current regulation
- · Decommissioning, removal and disposal of plant and machinery
- · Hazardous waste management
- · Decontamination and remediation
- Environmental Site Compliance Audits



Site Decontamination

We provide Site Decontamination services across a wide range of industry sectors to manage, or eliminate, hazardous chemicals and materials. Whether chemical spill response, full-site decommissioning and

restoration, machinery decontamination, or hazardous waste clearance, our engineering team will assess, and eliminate, any risks to the environment and human health.

- · Delivered by a team of chemical engineers
- Total package site assessment to decontamination and remediation
- · Tailored to site or industry; from pharmaceutical to civil defence
- Preventative services consultation, monitoring and anti-bacterial coatings
- 24/7 emergency chemical spill and Hazmat response



Environmental > Environmental Services

Tankering

Whether carrying fuel and other bulk liquids, or removing waste, Adler & Allan has a fleet of suitable tankers and will ensure compliance requirements are met. Safety and maintaining product quality

are our priority; we have many years' experience handling a wide range of fuels, and the management, uplift and disposal of hazardous waste.

- Comprehensive tanker fleet, including curtain siders and hiabs
- Experience in handling a wide range of fuels and hazardous wastes
- In-house UKAS accredited Road Tanker Inspection and Testing service
- Extensive range of specialist cleaning and waste management equipment



Environmental > Environmental Services

Waste Collection and Disposal

The Group's waste management team is fully licensed to handle commercial and industrial waste in accordance with the Hazardous Waste Regulations. Our collection service includes the

classification, packaging and disposing of most types of waste, including bulk liquids and chemical smalls. We have a comprehensive fleet of tankers and our own waste treatment facility.

- Works in accordance with the Hazardous Waste Regulations
- Collection service
- · Classification, packaging and disposing of most types of waste
- · Comprehensive fleet of tankers
- Site clean-up and plant removal
- · Hazardous waste treatment facilities



Environmental > Environmental Services

Waste Treatment

We use the latest technologies for waste disposal and treatment. Adler & Allan treat most types and quantities of waste, including bulk liquid industrial wastes, packaged hazardous wastes

and laboratory chemical smalls. We have our own treatment facilities to handle toxics, flammables, and oxidisers as well as non-hazardous materials.

- · Latest waste disposal and treatment technologies
- · All types and quantities of waste dealt with
- Own treatment facilities and excellent contacts with other waste treatment providers
- Bulk liquid hazardous wastes and laboratory chemical smalls
- Toxics, flammables, oxidisers and non-hazardous materials





Fuel > Forecourt Services

Hazardous Area Electrical Works

Group Company, WES deliver electrical installation, engineering, maintenance and design services specialising in hazardous areas, such as petrol forecourts. Using our in-house team of UKPIA and NICEIC approved electricians, WES can can provide electrical works as standalone

jobs, PPM or as part of turnkey projects; from construction through to ongoing servicing.



- Design and build of forecourt electrical distribution equipment
- · Electrical maintenance and testing
- · Specialists in hazardous areas
- Engineers carry UK PIA 'Passport to Work'
- Accredited to DNV (Det Norske Veritas)
- Delivered by expert team at Worcester Electrical Services (WES)



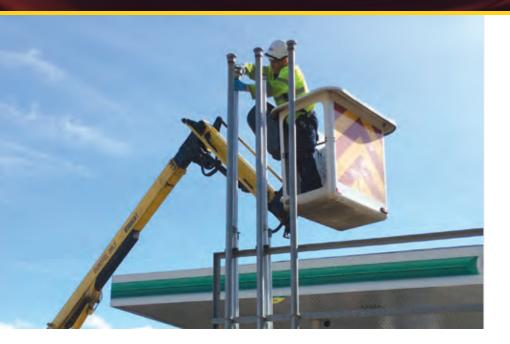
Fuel > Forecourt Services

Masstech® Tank and Line Testing

Originally developed for the aerospace industry, the MassTech system is world-renowned for fuel leak detection and loss control. MassTech is safe and reliable, with testing carried out while a retail site

continues to operate normally. The data collected is independently analysed, and a record of performance is kept on Adler & Allan's database.

- Originally developed for the aerospace industry
- Safe and reliable for use in the retail sector
- Testing can be carried out while a site continues to operate normally
- Data independently analysed and a record of performance kept on our database



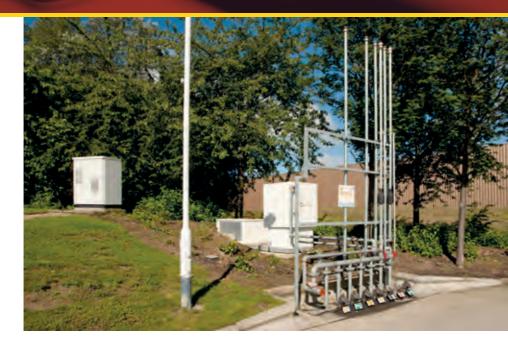
Fuel > Forecourt Services

Vapour Recovery Testing

Adler & Allan specialises in the diagnostic testing of tanks, lines and vapour recovery systems, servicing most of the leading petroleum and supermarket companies in the UK. We hold the exclusive European licence for the MassTech® advanced diagnostic system, which allows highly

accurate vapour recovery testing; a safe and reliable solution, with testing carried out while a site remains operational. Adler & Allan can offer a full management programme so that testing is carried out on schedule, as well as ensuring a site meets environmental compliance.

- Vapour recovery testing for UK's leading forecourts
- Full management available
- Exclusive licence for MassTech® advanced diagnostic system
- No need for disruption or downtime
- · Replacement and re-test of failed components



Fuel > Forecourt Services

Vapour Recovery Refiner

All retail fuel stations suffer wet stock losses. The Group's Vapour Recovery and Testing services, delivered by E&S Environmental, cover the conversion of petrol vapours to liquid fuel, and the diagnostic testing of tanks, lines and the vapour recovery systems themselves. Effective vapour recovery can save

retailers thousands of pounds and reduce air pollution, with system testing also ensuring environmental compliance.



- · Easy to install vapour recovery system
- Handles the large vapour flows present during delivery
- · Suitable for any forecourt site configuration
- · Servicing most of the UK's leading petroleum companies
- Exclusive European licence for MassTech® advanced diagnostic system

Case study > Fuel and Forecourt

Fuel Polishing

The Project

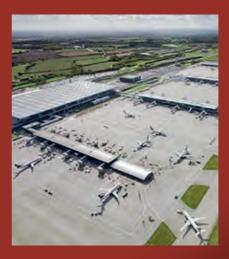
Our client, an airport energy company, is responsible for supplying Derv, unleaded petrol and gas oil for all transport to most UK main airports. The buses, police cars, ambulances, fire engines and snow ploughs supplied by the refuelling stations are all critical to the safe running of the airport. Stansted management called Adler & Allan as a number of buses were experiencing filter blockage and subsequent breakdown and the Derv pumps were inoperative.

The Solution

Our team set to work reviewing the existing supplier's methodology and then intitiated a new plan to rectify the problem and ensure Stansted could continue to operate as an airport. Over a 3-day period including the weekend, Adler &







Allan operatives removed both of the Derv tank lids and uplifted the remaining fuel on site. Using our mobile Fuel Polishing units we processed all the Derv through the polishing process back to its original condition.

A man-entry tank cleaning team thoroughly cleaned and removed the considerable sediment/sludge build up found on the tank surfaces using a vacuum tanker. Finally, all the lines from the tank to the dispensers were 'pigged' and flushed with clean fuel, the tanks were dosed with a suitable biocide to delay future microbial contamination and the dispenser filters were changed and the pumps were bled.

The Outcome

The site is now up and running and no further pump or vehicle problems have occurred or expected.

The client awarded Adler & Allan the contract to look after all of its refuelling sites.



Fuel > Specialist Fuel Services

Fuel Polishing and Mobile Tank Cleaning

Fuel polishing and tank cleaning is essential to keep fuel systems in good working order. Our Mobile Tank Cleaning (MTC) services, delivered by Group Company, E&S Environmental, will remove water, sludge and microbes, to ensure fuel and tanks are contamination

free. E&S' MTC Unit combines filtration and polishing, treating up to 100,000 litres of fuel per hour.



- Delivered by E&S Environmental, the market leader in fuel polishing and tank cleaning
- · All water, sludge and microbes removed
- · Combination of filtration, fuel polishing and a specialist fuel catalyst
- Fuel treatment quantities from 3,000 to 100,000 litres per hour
- MTC Unit on site, with no need for de-gassing or fuel removal



Fuel > Specialist Fuel Services

Fuel Sampling and Lab Analysis (UKAS accredited)

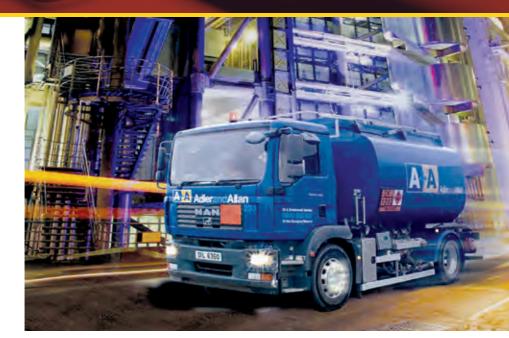
Contaminated fuel can damage equipment and is expensive to replace. Routine fuel sampling, testing and analysis is provided as part of Adler & Allan's preventative maintenance programmes. Testing is carried out at our UKAS accredited laboratory, which tests to ASTM and

EN ISO standards. Fuels covered include petroleum refined fuels, aviation fuel, diesel, gas oil and kerosene.



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- Delivered as part of Adler & Allan's preventative maintenance programme
- Testing carried out at UKAS accredited laboratory
- Testing to ASTM and EN ISO standards
- Petroleum refine fuels, aviation fuels, diesel, gas oil and kerosene covered
- · UKAS accreditation pending



Fuel > Specialist Fuel Services

Fuel Supply (Emergency 24/7)

We deliver a range of fuels by tanker, bowser or drums. Adler & Allan has the skills and experience to meet a variety of demanding fuel distribution challenges, including 24 Hour Emergency Fuel Delivery to retained customers. Temporary fuel tanks and tankers are on standby for emergencies, with fuel uplift and transfer available between sites.

- Delivered by tanker, bowser or drums
- Ability to meet a range of demanding fuel distribution challenges
- 24 hour Emergency Fuel Delivery available
- Temporary fuel tanks and tankers on standby for emergencies
- Fuel uplift and transfer available



Fuel > Specialist Fuel Services

Fuel Uplifts and Transfers

With a specialist tanker fleet, we provide fuel uplifts, transfers and manages fuel crossovers. All our drivers are trained in operating fuel transfer pumps, handling hazardous materials and spill response procedures, ensuring problems are dealt with safely and professionally. Adler & Allan handles all types of fuel and can uplift from above and underground storage tanks.

- Drivers trained in operating fuel transfer pumps and handling hazardous materials
- Spill response procedures to deal with problems safely and professionally
- · All types of fuel handled
- Uplifts available from above and underground storage tanks
- Fuel crossover management available



Fuel > Specialist Fuel Services

Road Tanker Inspection and Testing

Group company, E&S Environmental, provides independent road tanker inspection, testing and certification services. UKAS accredited to ISO 17020 and licensed by the DfT as a Type 'C' Inspection Body, our highly trained

inspectors visit clients onsite to carry out testing, with a full fleet management service for any size of operator.



- UKAS accredited to ISO 17020
- Licensed by the DfT as a Type 'C' Inspection Body
- Highly trained and experienced team of engineers
- Onsite testing, with no need for tanker removal
- Full fleet management service for any size of operator





Environmental Consultancy

Reduce costs and minimise the legal and financial liability of contaminated land with Adler & Allan's expert consultation and remediation services. All works are carried out in accordance with Environment Agency and Defra guidance, comprising a preliminary risk assessment, contaminated land options appraisal, evaluation of soil and/or groundwater and the implementation of ground remediation works.

- · Preliminary site risk assessment
- · Contaminated land options appraisal and design
- · Evaluation of groundwater and/or soil remediation options
- Implementation of ground remediation works, including post spill services



Emergency Plan Writing

An environmental disaster, such as flooding or a polluting spill, could happen at any time. Our emergency plan writing services, which include site audits and comprehensive legislative information,

will help your business prepare for the unexpected. Spill kits, training in emergency procedure and 24-hour environmental response services, provide further support should disaster strike.

- Practical expertise in disaster response
- Up-to-date legislative information
- Site audits
- Additional support spill kits, training and 24-hour Environmental Response



Environmental Site Audit

Identify the environmental risks your business faces with Adler & Allan's site auditing services. Covering safety and pollution prevention measures, an environmental site audit will increase your awareness of regulatory obligations and assess the effectiveness of any existing environmental plans; mapping nearby waterways, inspecting equipment, such as tanks, and advice on emergency procedure.

- · Advice on pollution prevention and general safety
- · Overview of legal and regulatory obligations
- · Assessment of existing environmental and emergency plans
- · Site mapping, including drainage and waterways
- · Tank installation and inspection advice



Flood Consultancy

The Group's flood mitigation consultancy services can help businesses plan for and prevent flooding. If flood risk has been identified, we can assist in creating suitable action plans, including advice on

flood defences, asset resilience methods, such as protective coatings and linings, civil engineering works and response procedure in the event of a flood.

- Flood mitigation experts, protecting some of the UK's key infrastructure assets
- Advice on flood defence measures, including barriers, passive and reactive systems
- Disaster planning and procedure
- · Civil engineering works and protective coatings and linings



Ports and Harbours Consultancy

Oil and other hazardous liquid spills are a particular concern in the port and harbour environment. Adler & Allan provide environmental disaster planning and prevention consultancy for ports and harbours. We deliver environmental auditing services to identify risks, highlight safety and assess pollution prevention measures.

- Environmental auditing services
- Identifying environmental risks, safety and pollution prevention measures
- · Minimising disruption and pollution in the event of a disaster
- · Specialist spill kits
- · Emergency response training



R&D Bespoke Solutions

The Group has a team of expert personnel, including leading chemists, engineers and consultants, available to develop bespoke solutions for clients across a range of sectors. We can help modify existing

products and services to improve output and efficiency, or develop completely new ways of working to meet a customer's needs or solve a specific problem.

- Bespoke solution examples include flooding and pollution prevention products
- · High-profile clients in the utility, telecoms and forecourt industries
- R&D team made up of chemists, engineers and consultants
- Modification to existing products/services or completely new inventions
- CAD trained staff to create technical drawings



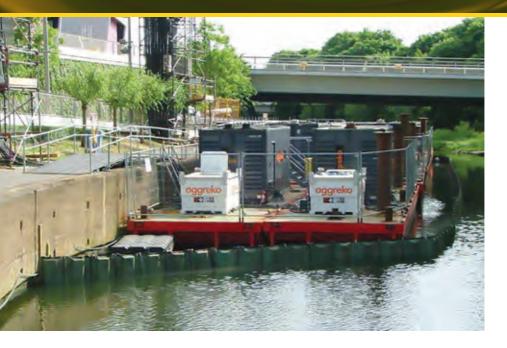


Site Survey

Our site surveys help customers predict the life expectancy of assets in order to manage future costs by identifying and prioritising actions, relating to fuel storage systems, including tanks, separators, drains and general risk (such as pollution or flooding). Ensuring compliance with

the Control of Pollution Act 2001, Oil Storage Regulations 2016, Environmental and Waste Act 2001 and EEMUA. we can provide standard and bespoke site surveys, as well as the design and installation of fuel storage systems.

- Surveys for the design and installation of fuel storage systems
- Standard or bespoke fuel system compliance surveys
- · CCTV drainage and separator surveys
- · Risk ratings, covering pollution and flooding
- · Predict asset life expectancy and future costs



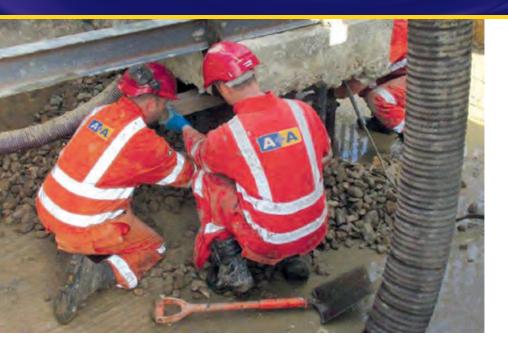
Spill Contingency

As the UK's leading environmental spill responder, Adler & Allan is perfectly placed to help businesses plan for a spill, ensuring that, if the worst does happen, financial

and environmental threats are minimised. We provide site audits, advice on plan implementation in the event of disaster and appropriate spill kits.

- Spill plan creation, including a site audit
- · Advice on plan implementation
- Up to date legislative information
- · Spill kits and emergency equipment
- · Spill procedure training





Technical Services > Construction Works

Bund and Containment Construction

Storage tanks used for fuel, oil, diesel, chemicals and gas, require bunds to prevent pollution. Adler & Allan provide bund and containment construction, using bricks, blocks and reinforced concrete.

We also use protective coatings and GRP linings to extend bund life and further prevent leaks and damage from hazardous liquids.

- Bund construction for a wide range of storage tanks; fuel, oil, diesel, chemicals and gas
- Protective coatings and GRP linings to extend bund life
- Meet Oil Storage Regulations
- · Prevent costly tank replacements
- · Bund cleaning and maintenance also available



Technical Services > Construction Works

Complex Civil and Building Maintenance

Our complex civil and building maintenance works covers a range of services for sites where equipment must be maintained in order to prevent pollution, and keep systems operational – DNO

substations, for example. We provide spill containment solutions, general tank servicing, bund repair and maintenance, working on site and around the clock to minimise downtime.

- · Compliance with tank storage and pollution guidelines
- Specialist spill and flood containment solutions, such as JBAR™
- · Nationwide teams of fully-qualified engineers
- · Complex repairs and general maintenance services



Technical Services > Flood Services

Flood Risk Assessment

Adler & Allan's flood consultancy services cover everything from the initial Flood Risk Assessment (FRA), to the advice and installation of mitigation measures, emergency planning and Flood Awareness training. The initial FRA includes topographical surveys, which look

at an areas flood risk now and in the future. From this, a contingency plan is drawn up, including recommendations for flood mitigation (defences, civil engineering works and protective coatings) and response procedure.

- Flood Risk Assessment (FRA)
- Mitigation solutions survey and implementation
- · Emergency flood planning
- · Flood Awareness training
- · Contingency plans
- 24/7 emergency flood response



Technical Services > Flood Services

Flood Resilience

Adler & Allan's flood installation services can help businesses implement flood mitigation measures, pre-empting flooding following a survey, or as part of A&A's post event remediation. The company has a range of business resilience solutions, including advice on and the installation of passive and reactive solutions; such as

defences, protective coatings and linings, civil engineering works and response procedure in the event of a flood. Adler & Allan works with BERG (Business Emergency Resilience Group) to help businesses and communities plan for and protect against flooding.

- Flood mitigation experts, protecting some of the UK's key infrastructure assets
- Advice on flood defence measures, including barriers, passive and reactive systems
- · Disaster planning and procedure
- · Civil engineering works and protective coatings and linings
- Post flood remediation services
- · Business resilience solutions

Flood Resilience

The Project

The Kirton Substation is a 132kV facility in Lincolnshire that includes a transformer, switch gear and a switch room. A flood risk assessment of the site identified a change in the flood boundaries and the operating DNO needed to increase the flood mitigation measures across the site to take into account the increased flood risk.

Adler & Allan were asked to propose a range of flood mitigation measures for the site, taking into account the budget constraints and requirement for maximum asset uptime.

Following a site survey based on the risk assessment, Adler & Allan proposed an innovative solution including its patented flood products.

The Solution

As part of a programme of works, Adler & Allan successfully installed a comprehensive suite of mitigation measures to help protect the transformer, switch gear and switch room from possible flooding. Both the transformer and switch gear were bunded using A&A's patented JBARTM modular system. JBAR was installed using only hand tools while the transformer and switch gear were live.

The bund walls were built in nonconductive GRP, with external corners and joints.

The bunds were then spraylined using Adler & Allan's polyurea coating. This specialist formula forms an impermeable layer of protection, preventing the ingress and egress of water and chemicals from either side of the bund. Adler & Allan's polyurea coating also offers complete hydrocarbon resistance in the event of an oil leak, and is guaranteed for a minimum of 10 years.

Due to the varying size of the bunds and to comply with safety distances, GRP stairs and a GRP Cat Ladder System were



installed for access. For complete peace of mind, the bunds contained a backup sump, pump and alarm system. The perimeter of the Switch Room building was excavated to expose the top of the foundations the external walls were spray lined up to the specified flood risk height with Adler & Allan's polyurea coating to render them waterproof.

CSD Rise sealed cables and non-return valves were placed on drains and sink waste pipes, and self-closing airbricks were installed around the building. A backup sum and pump with a control unit was also installed, along with a steel flood security door.

The Outcome

Adler & Allan successfully delivered the project on time, on budget and with no transformer downtime.

The project took just 4 weeks, saving 80% time on traditional methods. Adler & Allan's team of authorised APs worked closely with the DNO's SAP to ensure compliance with their working practices and approach, and to minimise the time involvement from the SAP.

The substation is now mitigated against flooding, with a 10-year guarantee on the JBAR and Adler & Allan's polyurea coating installations. Due to the capabilities of the solution installed by Adler & Allan, the DNO is also assured of guaranteed oil containment and environmental compliance should there be a leak.



Technical Services > Fuel PPM and POL Services

PPM – Gauge, Alarm, Pump, Fuel Management Systems

Planned Preventive Maintenance (PPM) is essential for businesses to ensure plant and machinery operate correctly, preventing downtime and profit losses, while meeting safety and legislative

requirements. We deliver PPM services to a wide range of sectors, including organisations that store and transport fuel where gauge pump and alarm testing is essential.

- Delivered to a range of sectors, including organisations that store and transport fuel
- · Covers gauge, pump and alarm testing
- Meets safety and legislative requirements, including OFTEC compliance
- · Pre-PPM assessments, including equipment status and environment asset list
- · Prevents equipment damage and environmental incident

PPM

Project Requirement

Our client provides the total Facilities Management to MOD sites in the South East. On the majority of these sites there is an oil storage infrastructure in a variety of forms supplying fuel to a generator, boiler or a vehicle refuelling stations. These all need regular maintenance to minimise the risk of failure to critical services and also regular PPM keeps operational downtime to a minimum.

Project Solution

Since 2009 Adler & Allan have been looking after this infrastructure, carrying out PPM at regular intervals, dependent on M&E equipment usage, regulatory guidance and any reactive works commissioned. Tasks range from simple visual inspection of equipment to full internal tank inspections and replacement of parts. The regular PPM programme



has proven to reduce the amount of reactive calls to the equipment that A&A look after therefore minimising overall costs for callouts throughout the year. The PPM service also reduces the risk of an environmental disaster occurring by making sure all equipment transferring or storing oil is "fit for purpose."

What are the Benefits of Planned Maintenance/PPM?

The benefits of planned maintenance, or PPM, are many and can be broken down into a handful of distinct groups. No matter how you approach the idea, the bottom line is more productivity with greater potential profits for the company.

Scheduling: Planned maintenance allows front-line supervisors and managers to spend more time managing production and less time dealing with the consequences of system failures. **Reduce Costs:** It is far more costeffective to use minimal supplies in keeping a system in top operating condition than to invest in replacement apparatus or extensive parts lists.

Prevent Employee Downtime:

Preventive maintenance avoids such unexpected machine failures and helps keep the company running smoothly without undue interruption.

Increase Equipment Life: Equipment that is well-cared for will last longer, whether you are cleaning the fuel tank, changing the oil in a fork truck or checking for oil leaks.



Technical Services > Fuel PPM and POL Services

POL Maintenance

The maintenance of Petroleum, Oil and Lubricant (POL) assets is essential to the defence sector. To keep operations running smoothly, The Group offers a complete range of POL services, covering the new build, replacement and decommissioning of Fuel Stations, associated tanks and pipelines.

We provide reactive call out to repair faulty equipment, as well as NDT inspection, Planned Preventive Maintenance (PPM) and tank cleaning, to extend asset life and prevent downtime.

- PPM, replacement and refurbishment of POL assets
- · Reactive call outs to repair faulty equipment
- New build and POL decommissioning
- Working directly with the MOD
- Tank cleaning and NDT inspection over 1,000,000 litres in capacity
- VAREC certified to perform installations, support and maintenance



Technical Services > Protective Coating & Lining Services

Bund Lining

Extremely fast setting, tough and durable bund lining, creating a useable surface within 24 hours. Adler & Allan's polyurea spray coating can be applied to damp substrates, providing excellent

waterproofing and chemical resistance. We also supply GRP lining; a resilient, ceramic-like material which in 80% of cases, will prevent the need for bund lining renewal.

- Polyurea spray coating; tough, durable and usable within 24 hours
- Used by a wide range of sectors, including utilities, marine and forecourts
- Waterproof and chemical resistant
- GRP lining resilient, preventing the need for bund lining renewal
- Tested to ASTM standards
- · Fast return to service

Case study > Protective Coating & Lining Services

Chemical Bund Lining

The Project

Kempton Park Water Treatment Works dates from 1897 and is one of three works that processes water to feed into the Thames Water Southern Ring Main. As part of the treatment process water is dosed with chemicals to mitigate the impact of lead within the distribution network. These chemicals are stored in tanks on site which are protected by concrete secondary containment bunds. Over time these bunds have been eroded through spills and leaks compromising containment and posing a potential health and safety risk.

The Solution

Traditional remediation would involve extensive civils work, breaking out the existing bund and replacing with a concrete or brick structure. This would involve taking the process 'off line' for up to two weeks. Adler & Allan's Totex solution was to clean out the bund and apply Adler & Allan's polyurea coating to the existing bund restoring structural integrity and full containment within 24 hours without the need to disrupt operations.

Key Benefits of Using A&A coating:

Widespread use - provides structural integrity to any surface, thanks to the nature of its elastomer base.

Ease of use - there are no airborne particles, making it quick and easy to apply, even in confined spaces. It can be sprayed to any thickness in one application and be returned to service in a matter of hours.

Robust performance - thanks to its unique formula, our coating can withstand extreme temperatures, high impacts, expansion and contraction and is 100% waterproof, fire retardant and flame resistant.



Reduce costs - it's a secure, low maintenance lining capable of reducing the cost and potential environmental impact associated with spill clean-ups.

Eco-friendly - the coating is environmentally safe during application and once in place it contains low or no solvents or VOCs.

Methodology

Preparation

- Carry out a three stage wash to ensure all surfaces are uncontaminated.
- Remove all washings using a chemical resistant tanker.
- Carry out any minor repairs to existing substrate.
- · Apply Rallithane sealant to all angles and joints.

Coating

- Apply Stainguard Rapide Primer and broadcast with fine grit.
- Ensure all existing assets are covered to prevent any overspray.
- Sprav-apply our specialist lining system to 2mm thickness.

Quality Control

- Carry out dielectric testing to ensure containment is fit for purpose and to validate the coating.
- Apply an anti-slip surface where required using a mixture Polygrip adhesive and coarse grit.

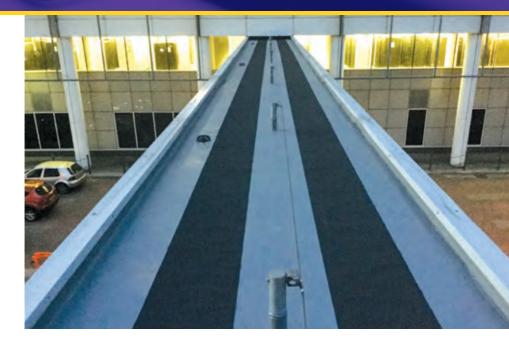


Technical Services > Protective Coating & Lining Services

Pipe Coating

We deliver pipework repair and lining for essential services such as data centre cooling and fuel transportation. Using a range of highly durable protective coatings and linings, some of which are the strongest on the market, Adler & Allan can extend the life of critical assets, with quick drying solutions that significantly minimise downtime.

- Corrosion prevention and curtailing
- · Investigation and remedial works
- · Specialist coatings and linings
- · Pipe cleaning and repair



Technical Services > Protective Coating & Lining Services

Roof Coating and Encapsulation

Adler & Allan's polyurea spray coating is designed to extend the life of roofs and other surfaces, while saving money on unnecessary repairs. The toughest and most durable protective lining available,

polyurea coating forms a quick-drying waterproof and chemical barrier to create a useable surface within 24 hours, protecting a wide-range of materials, including asbestos.

- Extend roof life and save money on unnecessary repairs
- Quick-drying waterproof and chemical barrier within 24 hours
- Eco-friendly, low or no solvents/VOC's
- Protect a wide-range of materials, including concrete, wood, metals and glass
- 24/7 technical support



Technical Services > Protective Coating & Lining Services

Tank Coating

Tank linings to protect against deterioration, resist water and chemicals while extending asset life. Made from Adler & Allan's polyurea spray coating, an extremely fast setting, tough and durable product, a useable surface is created

within 24 hours. We also supply GRP lining; a resilient, ceramic-like material which in 80% of cases, will prevent the need for tank lining renewal and ethanol resistant, TankTechnic™ linings, which can include remote monitoring.

- Polyurea spray coating; tough, durable and usable within 24 hours
- Used by a wide range of sectors, including utilities, marine and forecourts
- Waterproof and chemical resistant
- Remote monitoring options available
- Tested to ASTM standards



Compliance Inspections and Reporting

Regular storage tank inspections are essential to minimise the risk of tank failure, content contamination and pollution. The Group's tank compliance inspections and reporting services cover tanks used for fuel, water, chemical and food storage, with inspections carried out to EEMUA159 Level 2. Faulty tanks can then be repaired or replaced by Adler & Allan's skilled engineering team.

- · High pressure and ultrasonic testing
- Tanks inspected to EEMUA159 Level 2
- Minimise the risk of tank failure, content contamination and pollution
- · Full reporting and remedial works
- · Compliance with current regulation

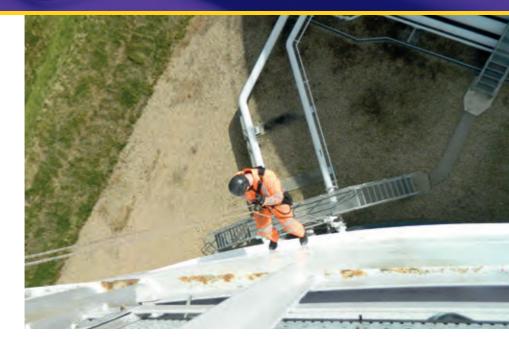


Cathodic Corrosion Protection

Industrial installations that come into contact with the sea, mains water and rivers can be prone to corrosion. To prevent the associated leaks, pollution, replacements and repairs, Adler & Allan delivers Impressed Current Cathodic

Protection (ICCP) and Sacrificial Anode Systems. The most cost effective solution available, Cathodic Protection is ideal for oil and petrochemical companies, ports and jetties, water authorities and government organisations.

- Industry leading corrosion protection service
- From feasibility studies to design, installation and ongoing maintenance
- · Prevents corrosion and breakdown, while increasing service life
- Minimises plant repair and pollution risks
- · Pipeline condition monitoring



Non-Destructive Testing

ContraCorrosion provides Non Destructive Testing (NDT) for tanks used to store fuels and other substances. NDT tests the quality of materials, fabrication and continuing integrity once in-use, without

destroying serviceability. Where issues are found, we can deliver maintenance works to avoid costly replacements and downtime.



- Available for tanks either in or out of service
- · Results presented in a comprehensive report
- NDT tests structure, weld strength, roof supports and tank thickness
- · Visual inspection and latest MFL, ultrasonic and magnetic particle surveys
- Maintenance and repair works following NDT



Hazardous Area Electrical Inspections

Our electrical installation, engineering, maintenance and design services cover all aspects of domestic, industrial and commercial works. Specialising in hazardous areas, such as petrol forecourts, separators and tank

installations, we have an in-house team of UKPIA NICEIC approved, DNV accredited electricians to provide support throughout the UK.



- Delivered by expert team at Worcester Electrical Services (WES)
- Standalone, PPM or turnkey solutions available
- Design and construction to testing and maintenance
- Hazardous area installations (petrol forecourts)
- Domestic through to commercial and industrial applications



Fuel Tank Installation Services

We provide fuel tank installation service, including full site surveys, tank recommendations and pollution-prevention measures. Once a tank is installed, we fully guarantee the product and offer an expert after-sales services; from one-off callouts to a comprehensive contract maintenance programme. Bespoke and off-the-peg tanks installed, plus associated pumps, gauges and alarms.

- Fully guaranteed tank installation
- Expert after sales support; from one-off callouts to contract maintenance programme
- Bespoke steel and plastic tanks, plus pumps, gauges and alarms
- Full site surveys and tank and configuration recommendations
- Steel tanks include 100% enclosed bunding and above-liquid-level connections
- Full site surveys and tank configuration



Masstech® Tank and Line Testing

Originally developed for the aerospace industry, the MassTech system is world-renowned for fuel leak detection and loss control. MassTech is safe and reliable, with testing carried out while a retail site

continues to operate normally. The data collected is independently analysed, and a record of performance is kept on Adler & Allan's database.

- Originally developed for the aerospace industry
- Safe and reliable for use in the retail sector
- Testing can be carried out while a site continues to operate normally
- Data independently analysed and a record of performance kept on our database



Pipework Installation and Servicing

We carry out the installation and servicing of pipework associated with storage tanks. As part of our tank services, we can provide full site surveys and make recommendations on the best materials.

configurations and pollution prevention methods for pipework, to prevent leakage, stock losses and environmental damage, with comprehensive ongoing maintenance contracts available.

- Full site survey prior to installation
- · Prevent leakage, stock losses and pollution
- Comprehensive maintenance contracts available
- · All products fully guaranteed
- Optional extras include pumps, gauges, alarms and overfill protection



Remote Tank Monitoring

Remote tank monitoring is an essential early warning tool to prevent environmental spills, flooding and dwindling fuel supplies. We install and maintain remote monitoring equipment for tank separators and

bunds, as well as supplying Automatic Shut off Valves. Telemetry systems allow customers to receive information about their monitored equipment, in real time, at any location.

- · Installation of remote monitoring equipment, including tank separators and bunds
- Automatic Shut off Valves designed to contain pollutants
- Telemetry systems allow customers to receive up-to-date information at any location
- Telemetry system monitoring to provide 24/7 support



Tank Cleaning and Purging

Adler & Allan cleans and purges all types of storage tanks; from retail forecourts to major refinery and military holding tanks. We provide cost-effective and environmentally sensitive tank cleaning and purging services, using the most

advanced technologies to ensure downtime is kept to a minimum. Manual and automated cleaning available, including powerful remotecontrolled mechanical washers.

- · Cost-effective and environmentally sensitive
- Waste removal
- Advanced technologies to ensure downtime is kept to a minimum
- · Manual and automated tank cleaning
- Compliant with latest legislation and standards

Tank Cleaning

The Project

As part of a programme of works being carried out by Adler & Allan at the Poolbeg Terminal in Dublin, the inspection of five fuel storage tanks to EEMUA 159 standards was required. Contra Corrosion, were asked to provide Non Destructive Testing (NDT), alongside Adler & Allan's market leading advanced tank cleaning and fuel polishing services.

The Solution

The five tanks which required inspection ranged from approximately 48m to 64m in diameter. NDT was used to inspect, test and evaluate the structure of the tanks, while identifying any issues that may be the cause of a problem in the future. Ideal for businesses that rely on tanks for storage of fuels and other substances, NDT can be carried out either in or out of service, ensuring good working order of valuable assets without destroying their serviceability.

With the terminal situated on the coast, our inspectors encountered all types of weather conditions. High winds, rain and freezing conditions presented particular health and safety concerns whilst the team were using the MEWPs (mobile elevated working platforms) to inspect the tank's shell and roof. Work had to be planned meticulously around regular weather updates. Daily site meetings and constant communications between inspectors and the Adler & Allan site manager ensured the risks were being constantly assessed.





The Outcome

Good communications across the divisions was instrumental in completing inspections within the given time-frame. The works began in November 2016 and were completed in March 2017, with reports issued and dealt with, helping Adler & Allan teams to bring the terminal up to standard for the next phase of development to begin.



Tank Decommissioning and Removal

The Group specialises in tank decommissioning and removal from both above and below ground. With many years' experience of oil and other storage removal works, We take exceptional care to prevent potentially unstable tanks from

causing serious pollution or explosion risk. Services include tank purging, waste removal, temporary 'mothballing' and permanent decommissioning.

- Hot and cold cutting equipment
- · Company-owned excavation and crane plant
- · Highly experienced team
- Tank removal from above or below ground
- Tank purging, waste removal and decommissioning



Tank Inspection EEMUA/API/NDT/OFTEC

Tank inspections are essential to minimise the risk of failure, fuel contamination and leakage. Adler & Allan carries out inspection and testing services for the fuel, water, chemical and food industries. Compliant with standards EEMUA Level 2, API and NDT, using the latest technology we test for leaks and tank integrity, plus inspect and provide repairs.

- Tank inspection services for the fuel, water, chemical and food sectors
- · Compliant with standards EEMUA Level 2, API and NDT
- · Latest technology used to test for leaks and tank integrity
- Highly skilled welders to inspect and provide repairs

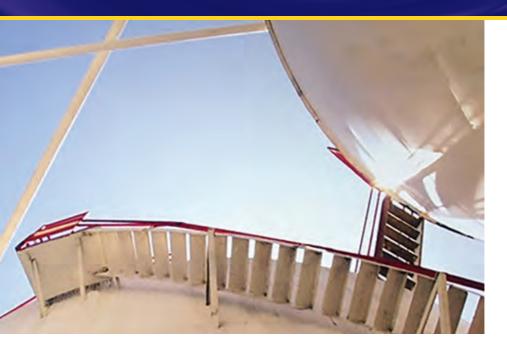


Tank Repair

Tank repair for all types of above or below ground storage tank; from retail forecourts to major refinery and military holding tanks. We return tanks to safe and efficient use

within the shortest timeframe possible, to prevent downtime and minimise the risk of tank failure and environmental incident.

- Tanks returned to safe and efficient use within a minimal timeframe
- Prevents the risk of downtime, tank failure and environmental incident
- · Above and below ground tanks repaired
- · Team of fully qualified, expert welders



TankTechnic™ Double-Skin Linings

TankTechnic™ linings provide transformative solutions for existing storage tank installations both above and below ground. The systems are ideal for non-pressurised tanks that store potentially hazardous liquids; such as automotive

fuels or chemicals. DOPA, TankTechnio's double wall lining solution, also includes 24/7 remote leak detection monitoring, to prevent contamination, tampering and pollution.



- Total resistance to ethanol based fuels, biodiesels and wide range of chemicals
- Prevents pollution and protects against contamination
- · Cost effective alternative to tank replacement
- Minimal tank downtime during transformation
- 24/7 remote monitoring with DOPA system

Technical Innovation Demonstrations

Case studies and technical specifications are great, but sometimes things have to be seen to be believed

Adler & Allan offer two ways for prospective customers to see our leading technologies and innovations in action: Technical Innovation Centre days and mobile demo visits.

TECHNICAL INNOVATION CENTRE DAYS

Held at our national Technical Innovation Centre in Brize Norton, we hold multiple demonstration days each year, allowing visitors to experience a selection of our innovations in practice.

Discover how our many resilience services and products extend asset life and create resilient assets.

Experience 5 different demonstrations. each hosted by an expert in their respective field.

Discuss your challenges with water, utility and asset resilience experts and advisors.

MOBILE DEMONSTRATION VISITS

Our purpose built mobile demo trailer allows us to make personalised visits to organisations interested in our services and engineering solutions.

This enables us to provide bespoke advice and guidance during each session to help you find the right solutions for your specific challenges.

If you and your colleagues would like to book a visit from our team of resilience experts contact us on 0800 592 827.

"SEEING IS BELIEVING!"





Asset Resilience

We provide resilience engineering solutions to most Utility and Telecoms companies nationwide, protecting and improving the value and longevity of their assets



Emergency response

We have responded to over 3,000 incidents across the whole of the UK in the last 3 years



Compliance

Delivering best practice in Regulatory Compliance. Trusted by government agencies, trade bodies, defence organisations and many of the UK's leading companies



Industry Asset Coverage

Over 50 industries in the UK and overseas rely on our services. Currently we provide maintenance for over 10,000 commercial and defence assets in the UK



Specialist Response Services

We provide response services for over 250 organisations, who maintain a total of over 100,000,000 litres of fuel annually



Technical Innovation Centre

Over 100 organisations visited our R&D Innovation and Demonstration Centre

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