





Foreword

The world of decommissioning can be highly complex and extremely hazardous. But with projects frequently brought about as a result of site closures or corporate rationalisation, it is often viewed as an unwelcome event, to which minimal and in many cases, inappropriately skilled resources are allocated. Risks consequently increase, legislative compliance becomes difficult to manage, and unforeseen threats to the environment, commercial reputation and ultimately life, can develop.

On the other hand, with an experienced team, meticulous planning and a safety-first mindset adopted by all, projects large and small can be undertaken cost-effectively, with maximum respect for the environment and, most importantly, without incident or injury.

Having operated in this specialist engineering discipline for almost 30 years, RVA Group has compiled this informative, advice-led and straight-talking overview, so that you can start to explore how to procure robust solutions for your own decommissioning project.

Even if you read this document from cover to cover, we know you will still have questions to ask at the end. But we hope you will feel better informed as you prepare to embark upon your assignment, and we look forward to continuing the conversation with you.



Richard Vann
Richard Vann, CEO

Who we are

RVA Group is a specialist project management and engineering organisation providing knowledge-based support to ensure the successful delivery of decommissioning, decontamination, dismantling and demolition projects worldwide.

We were established in 1992 to fill a market void within the high-hazard operational sectors of power generation, and chemical, petrochemical and pharmaceutical industries. Our hard-earned reputation and client portfolio – which comprises major global brands including BASF, ConocoPhillips, INEOS, ENGIE and GSK – has since grown purely on merit.

With extensive technical experience, our experts have become renowned as leaders in their engineering disciplines. Working exclusively for site owners and operators, we work totally independently of the contractor supply chain and are therefore able to provide uncompromised and unbiased advice at all stages. This ensures the delivery of safe, commercially-secure, efficient, environmentally-sound and best-value outcomes on every occasion, whilst at the same time allowing clients to focus on managing their core businesses.

In 2017 – the year we celebrated our 25th anniversary – RVA was acquired by Prague-based Energetický a průmyslový holding (EPH). Whilst little changed operationally, this milestone marked the beginning of RVA's next quarter-century, at the same time as providing an excellent platform for us to confidently strengthen the team and expand further throughout Europe and beyond.

With offices in the UK and Germany – and having now completed in excess of 800 major decommissioning projects internationally – our experience spans work in the EU, North America, the Middle East and Asia. Our principal areas of specialism lie in heavy industrial projects within the chemical, petrochemical, pharmaceutical, oil and gas, manufacturing, power and energy industries.

What we do

RVA does not operate a generic approach. Drawing upon years of specialist engineering experience, sector knowledge and independent commercial awareness, we offer a wide range of services from which clients can select, develop and implement project-specific strategies to deliver optimum outcomes.

Front-end engineering services

These form the foundations of safe and secure project deliveries.

Feasibility and options studies

These detailed investigative exercises evaluate the short and long-term safety, environmental, security, commercial and financial factors that could influence possible approaches to projects. The resulting documentation – complete with recommendations – provides clients with a clear and flexible management tool that facilitates informed decision-making.

Budgeting and estimating

It usually helps to have a project cost indication from the outset. This information can then be used to compile sanction grade estimates, funding applications and even determine the project programme/duration. Direct costs such as contractor fees will be evaluated alongside wider factors including the potential plant resale value, market conditions and the possible effect of legislative changes, for example. Not all projects can generate revenue or even be cost neutral. However, RVA's specialist expertise and commercial understanding will enable clients to save money in the long run.

Strategic planning

Before embarking on a project, it is important that all options have been considered, particularly by those who may not have a demolition mindset. We are therefore often able to suggest multiple potential approaches that the client may not have previously considered and find that this collaborative process helps to bring the team together and establish rapport from the outset.

Decontamination and isolation strategies

Drawing upon decades of planning, decontamination, dismantling, demolition and sector-specific knowledge, RVA is able to devise and audit bespoke decommissioning and isolation strategies. These are designed to help bring a site to a 'known' condition whilst managing risk and avoiding unnecessary cost.

Tender documentation

Clear, concise and accurately constructed tender information will form the basis of a successful project, so RVA is often asked to write or audit such documentation. It typically includes the environment, health and safety plan, specification of works, contract conditions, bills of quantities and forms of tender. Any client-specific clauses are also incorporated to ensure corporate governance is applied.

Contractor assessment

An experienced project team is crucial. Having worked with many contractors globally, RVA is trained to recognise teams' strengths and weaknesses and we know which questions to ask to truly assess individuals' competence. Some skills are transferable across assignments, whereas others are not. RVA can therefore assist or fully manage the contractor audit and selection process to bring together the required combination of expertise.

• Structural assessments and surveys

These thorough assessments typically investigate the condition and stability of site assets before providing corrective action advice and costings. The outcomes of these surveys often help to determine the project routes that follow.

Asset recovery

From the salvaging of individual items, to the dismantling of entire plants for reinstallation elsewhere, the goal should be to minimise cost whilst maximising return. We will consider factors including the age of the assets, former operational conditions, the cost of recovery, transport, testing, external market forces and commercial confidentiality, when supporting the client through this decision-making process.

• Management of plant dismantling

RVA has managed several projects which have included the preparation and dismantling of production assets for shipment and re-build elsewhere. Not only can RVA deal with the planning and documentation of isolation and decommissioning regimes, we can also provide clients with comprehensive specification clauses for the work, thus minimising commercial exposure and ensuring the desired objectives are achieved.

Strong communication skills are required, particularly when coordinating the activities of stakeholders with different native languages, cultural norms and approaches to safety. RVA has therefore developed a proven structure for assessing the competence and suitability of labour in these circumstances, to ensure a shared mindset and commitment towards one common goal.

Works execution services

These ensure the best-value management of project safety, methodology, financials and site personnel.

Project management

The earlier RVA becomes involved in the process, the greater will be the level of safety, environmental and financial benefits achieved. We understand that every project is different and therefore tailor our management support to ensure the full consideration and control of safety, operational, commercial and reputational matters. Our objective isn't just to meet client expectations but to exceed them.

Whilst we frequently head up the project team ourselves, we also recognise the role and significant value of the client's personnel/existing site knowledge, and actively encourage their involvement wherever possible.

Health and safety management and auditing

Safety is absolutely RVA's number one priority, therefore we always guide and support clients' teams, to ensure operations are undertaken using best-practice procedures and methodology, which strictly adhere to ever-evolving and increasingly stringent legislation.

Health and safety plans are compiled in conjunction with other contractual documentation, and strong communication is ensured between client, contractor and RVA to ensure a truly shared responsibility and commitment to upholding health and safety standards. The introduction of learning event reporting, open health and safety discussions, and hazard workshops are just some of the tools used. The result is a cohesive output, with no conflict or misunderstanding when it comes to risk management and the goal to achieve EHS excellence.

Technical auditing

We draw upon decades of engineering experience to assess and assist in the development of the most suitable project methodologies. We see it as one of our core functions to intelligently interrogate contractors' proposed method statements and, where necessary, help collaboratively explore alternative approaches that will enhance safety, security and efficiency.



RVA's targeted skill-sets span disciplines including demolition, explosives, chemical, structural and mechanical engineering, to name just a few, and we can provide a resident or visiting management support, over the course of a project's lifecycle.

Financial project control

From the creation of bills of quantities or pricing schedules for completion at the tender stage, through to the structuring of financial milestones for use as valuation monitoring points, we acknowledge that cost control is vital. Whilst cost-control systems are often specific to the client's systems, we do utilise our knowledge of where the pitfalls may lie, to inform the process as much as possible.

Complementary services

We are here to offer a much needed 'helping hand' throughout the duration of projects, however complex.

• Baseline decommissioning and longer-term liability plans

These dynamic instruments enable the onward scheduling, preparation and budgeting of projects.

Accounting standards compliance

RVA has developed an auditable, robust and flexible asset retirement support service specifically designed for large scale and high value production assets. These vary from country to country, but examples include FAS143 and IAS 37.

Operational asset management and retirement provisioning

Our independent advice often acts as the foundation for a robust financial management tool which enables plant owners to confidently accrue adequate funds for eventual asset 'end of life' decommissioning.

This commercial resource can also be used to help conduct periodic assessments of plant viability against future liabilities, the evaluation of costs for retro-fitting the plant, and realistic cost awareness for the acquisition and divestment of assets, to name just a few.

• Care and maintenance management

Sometimes clients take their assets offline but delay the dismantling and clearance process. In such circumstances, we can develop robust procedures and systems to protect the integrity of these structures and make them safe. This sees us routinely advise on matters such as decommissioning strategies, fit-for-purpose decontamination regimes with appropriate documentation provision, and liaison with enforcing authorities regarding regulatory declassification and environmental permit surrender.

Contaminated land management

Environmental protection is coming under increasing scrutiny therefore we are often appointed to oversee site remedial works to ensure pollution is eradicated and the restoration of land is completed to an acceptable state, within budget.

License, mandatory operating framework compliance and permit management

Decommissioning projects must satisfy relevant local and national compliance requirements, including the fulfilment of responsibilities to enforcement agencies and operating licence authorities, for example EU Directive, Directive 2012/18/EU 'Seveso III Directive', known as COMAH in the UK.

RVA holds the experience and skill to support the duty holder through what can be a series of complex and time-consuming processes. Our experienced team will support clients through the multitude of tasks, as they move towards meeting criteria for surrender of environmental permits, e.g. The Environmental Permitting (England and Wales) Regulations 2016.

Statutory safety management duty holder responsibility

Many countries stipulate (or at least advise) that an independent, experienced health and safety specialist should be appointed to oversee the decommissioning works from start to finish, in compliance with locally applicable regulation, such as Directive 92/57/EEC – Temporary or Mobile Construction Sites, in the EU.

From CDM Principal Designer duties in the UK, to comparable duty holder roles in other regions such as SiGeKo – Planning prescribed by Baustell V in Germany, or the requirements set out in OSHA in North America, RVA has adopted this category of statutory duty holder responsibility on hundreds of occasions.

Stakeholder dialogue

Communication with all involved internal and external parties plays a crucial part in the effective delivery of a project. RVA is therefore frequently called upon to present to / chair discussions with management teams and company personnel, through to community groups, local authorities, enforcing bodies and the emergency services.



Testimonials

Sembcorp Utilities

"RVA helped us to deliver an incident-free outcome in the decomissioning and demolition of Derwent Power Station, Spondon, UK, within the budget cost and on programme. We recognised that the removal of hazardous materials and demolition of the massive and complex structures required specialist support. RVA took us seamlessly through the process, making sure the highest standards were maintained and exposure to risk minimised. In addition, some areas of the redundant station had become home to some protected species. RVA worked with ourselves in a diligent and collaborative manner, dealing with the local authority, ecology groups and other stakeholders, to ensure that measures were taken to minimise disruption to wildlife, the environment and our corporate reputation."

SABIC UK Petrochemicals

"RVA made a significant contribution to the Teesside demolition programme - a marvellous achievement, given the many complex engineering and EHSS challenges the team had to face along the way. Activities were completed with an exceptionally good EHSS performance, within budget and close to schedule, taking the impact of Covid-19 into account. As a result, SABIC successfully reduced many of the hazards associated with aged, redundant assets - for example asbestos and structural integrity. RVA robustly supported the SABIC team, from decomissioning, through demolition and site clearance."

GSK

"It was obvious that the key contractors in the decontamination and demolition industry respect RVA's expertise and knew that working on an 'RVA project' was important with regard to their reputation as being seen as a '1st Division player' in the industry."

Murco Petroleum

"RVA's expertise was vital in guiding us through the decommissioning and demolition preparation process which, as we found, is very different from the normal process of preparing equipment for work. RVA were also engaged to manage our interaction with the contractor supply chain for demolition and run the demolition contract tender process. They did this in a thorough and rigorous way. In this area again, their knowledge of the demolition industry and high hazard sites was invaluable."

BASF Finland

"We had prior experience of working with RVA in the North East of England, and employed the company once again on the strength of the team's specialist industry knowledge, and our need for a thoughtful, coordinated and attentive approach on the live Kaipiainen site. RVA's experience and professionalism ensured a safe and smooth project delivery. All work was completed on time and to budget and, most importantly, without incident."

ATCO Power Generation Ltd

"When the contractor encountered a number of operational and commercial difficulties during the project, RVA proactively provided support and advice to resolve a range of issues to the benefit of all however, it also ensured the Company's interest were at all times protected and financial exposure minimised."

Testimonials

GDF SUEZ Teeside Limited (ENGIE)

"It is inevitable that a project on the scale found at Teesside Power Station will give rise to issues and challenges, however where actions were required, RVA responded swiftly and firmly liaising with all parties in developing and implementing solutions with a non-adversarial approach, providing a satisfactory outcome for the client. In summary, RVA provided a proactive, comprehensive and value adding range of services, providing substantial presence in the HSE management of hands-on demolition. As such, I would have no hesitation in engaging in further work with RVA."

Teijin Polycarbonate Singapore Pte Ltd

"Teijin found RVA's detailed knowledge of the decommissioning sector combined with recent experience of operating in Singapore was of real benefit and value to the project and the Teijin team. We would not hesitate to recommend them to other companies when they have to face the challenges that a plant closure and site exit present."

Societe de la Raffinerie de Dunkerque

"RVA followed a meticulous process for the preselection of demolition companies during tendering, with a strong emphasis on the HSE standards and capabilities of the contractors. The tender package put together by RVA was very detailed and comprehensive, reflecting their long experience in decommissioning, decontamination and demolition projects. RVA has demonstrated robust best-in-class processes in their field of expertise. RVA personnel displayed strong attention to detail and a genuine concern for the well-being of the project. I felt that we were always working together in order to achieve the project's deliverables."



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