



#### Removing The hazard... Protecting The asset

NRC is an established international service contractor, who has been providing specialist and innovative solutions to the Oil & Gas, Petrochemical, Renewable, Utilities, Civil Engineering and Construction sectors for more than 30 years.

Specialising in high pressure and ultra high pressure water jetting and its associated applications, NRC have developed a portfolio of services in support of our customers in commissioning, maintenance and decommissioning activities.



Our equipment and specialist teams can be mobilised to operate anywhere in the world. A holder of internationally recognised accreditations with a proven track record, we are committed to excellence and delivering added value service to our customers.

# water jetting...

High Pressure (HP) and Ultra High Pressure (UHP) Water Jetting (also known as hydro blasting) are powerful and environmentally sensitive cleaning techniques.

Covering a broad scope of applications, NRC own an extensive fleet of ATEX and NORSOK compliant jetting units and compatible specialist accessories, certified to work in hazardous areas, operating to pressures of 3,000 bar (43,500 psi) and capable of various flows up to 550 litres per minute, facilitating multi-gun operation or use of automated systems to provide a complete and custom service to our clients.

The combination of our highly trained operatives, specialist equipment and propriety attachments ensure that we have the knowledge, experience and technology to safely and efficiently complete cleaning, cutting, descaling, coating removal and surface preparation in a range of diverse industrial contexts.







# tank & vessel cleaning...

In today's safety conscious work place the preferred option is of no-man entry into a confined space; accordingly NRC has developed a range of technologies and methods using automated and semi-automated tank cleaning heads, vacuum transfer systems and other pumping solutions to clean tanks and vessels either remotely or with minimum man entry.

All tank and vessel entries are potentially dangerous therefore where practical; operatives will use remote cleaning / flushing techniques. If and when confined space entry is required our personnel work under precise and comprehensive procedures, including task specific safety and escape routines using the correct breathing apparatus and atmospheric monitoring.

NRC own an extensive inventory of latest specification breathing apparatus, monitoring and communication systems. A unique combination of our specialist equipment, highly trained operatives and safe working procedures all contribute towards providing a consistent and proven level of performance and safety.







# vacuum transfer systems...

Included in our portfolio of industrial cleaning equipment is a range of high specification Vacuum Transfer Equipment providing a range of airflows up to 7650m³ / hr (4500cfm) and dependant on the specific gravity (SG) and composition of the material a removal rate of up to 12m³ / hr.

Our vacuum transfer technology, complete with supplementary filtration systems has been specifically designed and custom built to optimise performance. ATEX compliant and certified for use in hazardous areas we have constructed a range of diesel, electric, hydraulic and pneumatic driven vacuum systems which provide variable options for the contained and controlled uplift and transportation of materials (dry powders, sand, sludge and slurries) from tanks and vessels.

This innovative, safe and ergonomic equipment minimises the need for entry into tanks or vessels to carry out cleaning. This application forms part of our armoury of solutions and can significantly reduce the man-hours needed in the vessel and therefore reduces the possibility of hazard and risk exposure. Our 'brain over brawn' philosophy proves that enhanced safety and productivity can be simultaneously achieved.







#### pumping systems...

In addition to our range of vacuum transfer systems, NRC have an extensive array of hydraulic and pneumatic pumping solutions.

Within our pumping inventory, we have a range of rotary lobe, archimedes screw, centrifugal, peristaltic and jet pumps suitable for a diversity of processes and applications in addition to the more traditional pneumatic diaphragm pumps.

We own and supply an extensive fleet of hydraulic power packs suitable for various applications. Our fleet extends to ATEX-certified diesel and electric driven, single and twin circuit units, which are used to power our vacuum and pumping systems.

Our hydraulic power packs are rated for use in hazardous environments and come in a range of sizes encompassing a wide range of pressure and flow outputs, with our twin circuit options capable of running two hydraulic systems simultaneously.







### asbestos management...

Asbestos surveying, encapsulation and removal are specialist services demanding the highest standards of operation and procedural control. Our philosophy is not only to comply with the onerous legislation pertaining to working with asbestos, but to exceed these requirements.

NRC provide a turnkey asbestos management and handling service. This means that in a single operation, we solve the problem of locating asbestos and ensure its safe removal, transportation and disposal via our licensed transfer stations or directly to the disposal site.

On a project-by-project basis the best course of action is determined, based on the condition and location of the asbestos and other local considerations. When removal is deemed the best option we use the most appropriate stripping technique, or combination of techniques to minimise asbestos fibre release, taking into account the type of material containing the asbestos, the conditions and control of the work area and the ultimate disposal of the debris. The most advanced environmental monitoring equipment, wetting techniques and decontamination facilities are selected on a project-by-project basis to ensure that the asbestos is removed in a safe and efficient manner.







### HVAC/duct management...

HVAC/duct systems need to be inspected and cleaned regularly in accordance with legislative requirements as part of a planned maintenance routine to maintain system efficiency and integrity. This is to safeguard against hazards such as poor air quality, bacterial contamination and fire risk potential arising from the accumulation of dust and other debris within the system.

NRC have the knowledge, experience and technology to safely and efficiently complete HVAC/duct cleaning operations in a range of diverse industrial contexts, providing clients with the re-assurance that their HVAC/duct system is clean and operating efficiently. We also work with others who specialise in HVAC/duct system repairs in the delivery of an integrated maintenance solution and assisting our clients with the establishment of comprehensive planned HVAC maintenance routines (PMR's).







# industrial painting...

NRC has extensive knowledge and practical experience in the various techniques available for surface preparation and associated protective coating application methods to meet required industry quality standards.

We own an extensive inventory of equipment including semi-automated propriety systems enabling us to undertake surface preparation by means of UHP water jetting (hydro-blasting), abrasive (wet and dry) blasting and mechanical methods including dust-free and recyclable options. Once prepared, we can apply a range of coatings and composites including industrial epoxies, alkyds and urethanes, non-slip helideck and deck coatings, screeds and tiles, tank and vessel linings and anti fouling coatings by means of conventional spray, airless spray or manual brush roller application as appropriate.

Our core in-house capabilities and project management skills gives us the ability to provide integrated solutions and to deliver turnkey painting programmes for our clients as they combat corrosion and maintain their assets integrity.







### NORN management...

Naturally occurring radioactive material (NORM) deposits have been identified and recognised within the oil and gas exploration and production industry for a number of decades. Arising during the extraction of oil and gas, particularly from mature fields, NORM is also known as LSA (Low Specific Activity) Scale.

Over time, the accumulation of NORM material will adversely affect the effectiveness of oil field equipment and infrastructure but scale, sludge or other forms of NORM can be removed enhancing efficiency, prolonging its life span and/or facilitating reuse.

The management and handling of Naturally Occurring Radioactive Material (NORM) is one of the most heavily regulated areas in health and safety. NRC supports our clients by providing the necessary experienced, professional team to provide consultation, project management and guidance in all aspects relating to NORM detection, containment, removal and disposal.

NRC has the equipment, experienced operatives and the appropriate safe operating procedures and local rules to undertake NORM removal and/or decontamination, treatment and disposal operations.









#### waste management...

Waste management is one of the most heavily regulated areas of business, with every organisation having clear responsibilities and strict guidelines to follow.

NRC hold a waste carriers licence and own and operate waste transfer stations in compliance with the conditions detailed within our pollution, prevention control (PPC) permits.

Our dedicated transfer fleet provides specialist waste removal from both domestic and industrial sites, our 'carrier's license' enables quick and efficient transport of the waste to our licensed transfer station or an alternative authorised disposal point. Our waste transfer stations' storage and separation facilities are capable of accepting large quantities of oily water, drilling mud/cuttings and oil contaminated soils/gravel in addition to a diversity of chemicals, materials and products, all of which are categorised as 'special waste'.

Committed to research and development, NRC have developed modular treatment solutions which allow the processing of waste at site, enabling customers to introduce efficiencies, enhance cost saving and minimise environmental impacts.

Our Emergency Response Team is available 24 hours a day, 365 days a year and is able to respond rapidly and effectively to a wide range of emergency situations.







## camera inspection...

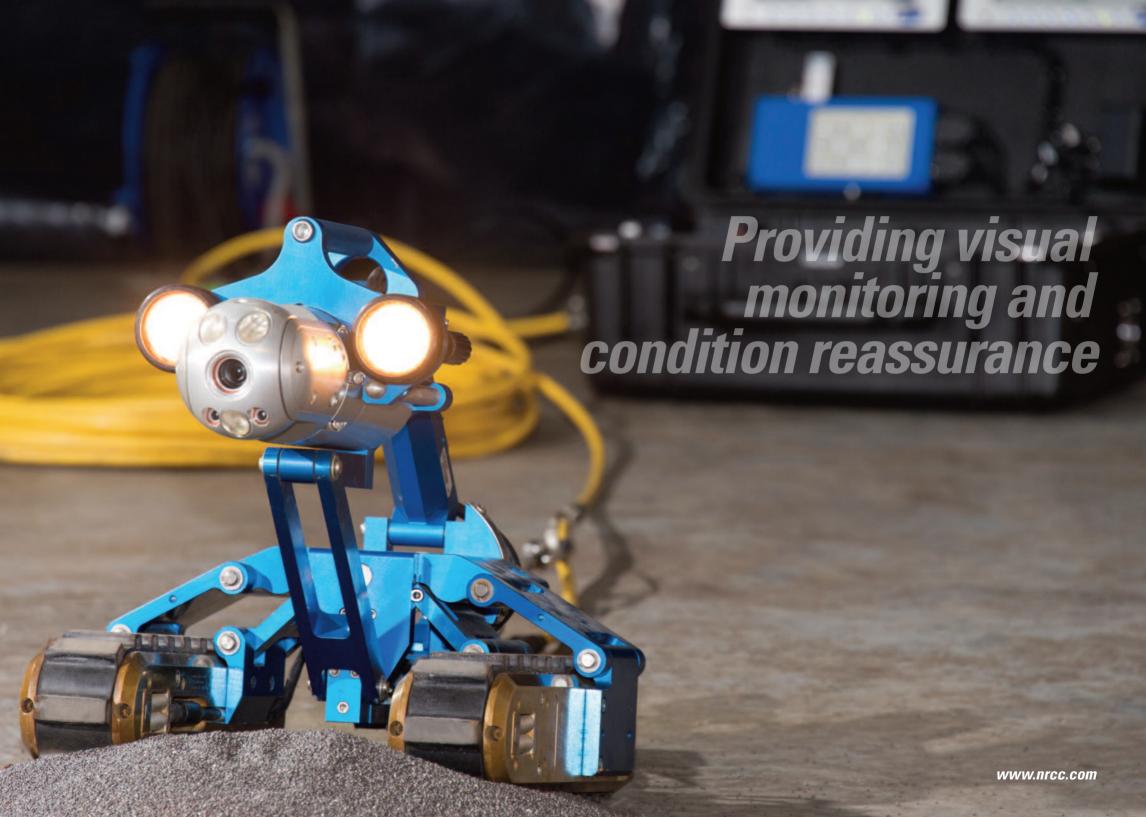
NRC provide a camera inspection service (CCTV Surveys) using the latest generation equipment. We ensure clients are provided with the most advanced technology available for inspection and maintenance work. Through CCTV surveys, clients receive condition reports showing clear and accurate imagery.

Our capabilities extend to the provision of explosion proof (Ex) pan and tilt colour cameras, light heads, High Definition Crawler units, control units and other specialist accessories designed to operate across a diverse range of pipework, from less than 25mm diameter through to more than 1,000mm. Utilising our Crawler Camera Systems, inspection runs of up to 300m from a given point of entry can be achieved (subject to pipework configuration).

In addition to our Ex rated systems traditionally used for pipe work inspection, NRC have a range of camera and borescope systems to complement our Ventilation Duct Survey and Inspection and Asbestos Management Services, allowing previously inaccessible areas to be viewed whilst negating the requirement for mechanical intervention.







## Support services...

NRC's facilities include fully functional maintenance workshops with warehousing, stores and significant storage / lay down areas. The investment in these facilities together with the ongoing development of an integrated computer network and common IT systems throughout the Company has been made to accommodate planned growth, in particular the ongoing and future internationalisation of the business.

Testimony to our commitment to service delivery, our support services is staffed seven days a week by experienced operations personnel and qualified technicians and we operate an out of hours on call service to provide the necessary level of support to our clients and field personnel alike.

As an organisation, health, safety, quality and environmental protection issues are integral to our success, as such; we have made significant investment in the development of our people and in developing our internationally recognised management systems.

Our depth of knowledge, expertise and can-do culture is coupled with an extensive and diverse range of specialist equipment which has been sourced and or designed to achieve optimum performance and long term reliability. This identifies NRC as the ideal project partner for clients throughout the industry.







#### COMUCICA MIC.

For information relating to the markets and geographical regions in which we operate and our local office contacts please visit our website www.nrcc.com or email us at sales@nrcc.com

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