MUNICIPAL & BYPASS



National Pump & Energy (NPE) has the products and experience to supply bypass, water, wastewater and sewage pumping solutions that work.



NPE are one of the largest specialised hire pump suppliers in Australia. We are experienced at the requirements of providing Bypass solutions for municipal water and wastewater, for councils and utilities, having the equipment, knowledge, and experience to supply hire pumps and specialised equipment for bypass pumping projects, throughout Australia.

NPE in-house engineering departments works with you to assist in the design and selection of appropriate pumps and equipment to optimise the performance and reliability of the temporary bypass project. The key components of the design assessment includes flow requirements, telemetry control/monitoring, pipeline size and other factors that will ensure an uninterrupted service during maintenance or upgrade works.

We have a huge range of pump and power equipment, with all equipment in stock, ready to deploy to your site. Our turnkey service commences with concept, design and complete engineering, through to installation and commissioning on site.

This includes but is not limited to the following:

- Submersible Pumps
- Immersible Pumps
- Silenced Canopy Pumps
- Wastewater Pumps
- Generators and Starters
- Web based Telemetry Control Systems
- High Head & High Flow Pumps
- Hoses, steel pipe, or high density polyethylene (HDPE) pipe, valves, pipeline plugs, and all other associated equipment
- Experienced crews for installation and maintenance





MUNICIPAL WATER & WASTEWATER TREATMENT

Today the water that leaves the plant is no longer wasted, it is a valuable resource. The requirements in the wastewater sector today are anything but simple. It requires valuable time, cost and energy to meet the challenges of unexpected flow levels and fluid characteristics. Everyone must work harder to find ways of protecting our precious water resource. Be it by recycling and returning to the environment or reusing options. As the list of requirements for discharge permits gets more complex, treatment activities and guidelines become more exacting.

Original equipment must be upgraded and replaced in older systems. Facilities must anticipate the future, prepare for expansion, and adhere to stronger limitations. All water and wastewater treatment plants and collection systems, regardless of size, deal with the same problems. The expense of water treatment is continually being challenged by an environment of changing regulations, and outdated infrastructure and downtime are not an option in these crucial tasks.



EFFLUENT MANAGEMENT

NPE specialises in consistently delivering improved wastewater treatment technology and continues with the effective and efficient management and disposal of effluent – a by-product of the extracted water treatment process. One of our underlying principles is to deliver sustainable practices that are environmentally sound in theory as well as in practice.

NPE invested more than two (2) years of research and development, resulting in an effluent processing solution that can now be completed onsite. The effluent, also known as liquid sludge, was previously removed from the project site for processing and disposal, which incurred additional transportation and scheduling costs. The benefits of this research and development are an environmentally effective process that maintains an economically viable operation, benefiting the client's bottom line.

Sludge Processing

The Sludge Processing Unit (SPU) is the tool used by NPE within the effluent management system. The press maximises the amount of water recovered from the liquid sludge, significantly reducing sludge volume and converting all liquid waste into a spreadable form that is then classified as solid waste for offsite disposal. The SPU is custom designed and built to site-specific requirements and is suitable for various applications.



INDUSTRY LEADING EXPERTS FOR SEWAGE BYPASS PROJECTS

Treated wastewater (effluent), is normally discharged into the environment, requiring sound management to overall protect public health and the environment. Temporary sewage bypass projects are an essential part of maintaining and upgrading ageing wastewater infrastructure.

At NPE, we deliver the complete bypass solution:

- Flow management plans
- We deliver pumping and pipeline Installation completion within the client's timeframe
- Thorough testing of all equipment, pipelines and all site works for the project before commencement
- Systems are capable of managing the peak incoming flows to the plant with redundancy and managing prolonged spikes from wet weather flows
- The performance of the project works in a safe and environmentally responsible manner
- Provide access to our clients and key stakeholder personnel to inspect, monitor and audit the works in progress. Maintain appropriate safety, environmental and quality control measures at all times
- Telemetry displays full visibility on critical pumping performance values & flows







BYPASS

As one of the largest specialised pump hire and sales suppliers in Australia, we are confident that we have the products and experience to supply water, wastewater and sewage bypass solutions that work.

NPE supplies the complete bypass pump hire solution allowing the critical repair and maintenance activities to take place without service disruption. Whether you need above ground automatic self-priming diesel driven pumps or electric driven submersible pumps, NPE has an extensive range to help you select the right pump(s) for the project.

Pumps are a critical part of any bypass operation. NPE owns and maintains a vast fleet of portable pump options and associated inventory to successfully serve your temporary bypass requirements.

NPE has the experience and innovative approach you can trust to provide technical design support, turn-key solutions, durable and reliable equipment, and competent management of the entire project within project costs and timelines.

NPE can offer a wide range of pump and power equipment for bypass works including:

- Submersible Pumps
- Silenced Canopy Pumps
- Wastewater Pump
- Diesel or Electric Drive
- Generators
- Telemetry Controls
- High Head & High Flow Pump
- Hoses, valves and all other associated equipment
- Experienced crews for installation and maintenance



READY FOR RENT

PUMPS | POWER | WATER TREATMENT | WATER MANAGEMENT

National Pump & Energy branch network is strategically positioned to service all parts of Australia. These hire branches are supported by a team of NPE representatives and field service crews so that every part of Australia has access to the best equipment and service, regardless of location.