

environment matters

# Water & Industrial Services





# Our business

Enva is a leading provider of recycling and resource recovery solutions, with locations across the United Kingdom and Ireland. With sustainability at the forefront of our proposition, we recover a broad range of hazardous and non-hazardous waste materials for re-use in manufacturing and energy conversion. We also provide a complete portfolio of industrial, water and waste water services. At Enva we are committed to recycling and resource recovery; it forms the basis of our business strategy and our values.

We support the life cycle of waste products to provide either a second life, such as the production of energy or, in many cases, closed-loop recycling solutions. Our dedication to developing new and innovative products and solutions and extending the life cycle of the world's resources is driving our business forward. Whilst to many Enva is a relatively new brand, our constituent operations have been around for many years and have significant heritage in the UK and Irish recycling and resource management markets. As a result, we are fortunate to have a highly skilled and experienced workforce who are close to their markets and customers. Operating under a single brand enables us to realise the associated operational and commercial synergies for customers across our key markets.







### What we do

Clean and safe water is a basic requirement for all. Our water and waste water treatment solutions, including sludge services and industrial cleaning and maintenance, supports the water industry ensuring that they can operate efficiently and cost effectively within stringent regulatory requirements.

Testing for a range of chemical and microbiological contaminants at our advanced laboratories, our technical teams ensure that drinking water is compliant and our experience in the industry means we are fully equipped to service individual customer requirements.



### Contents

Waste Water Treatment Services		
•	Biological Augmentation	5
•	Bespoke Chemical Products	6
•	Odour Abatement	8
•	FOG Removal	9
•	Sludge Management	10
•	Mobile Sludge Dewatering	10
•	Activated Sludge Monitoring	10
Water Treatment Services		11
•	UV Treatment	12
•	Activated Carbons	13
•	Filtration Technologies	14
Cooling Tower Disinfection		15
Process Water Tank Disinfection		16
Water Testing & Monitoring		17
Surveying Services		18
Drainage Networks		19
Industrial Cleaning & Maintenance		20
Total Waste Management Solutions		21
Emergency Response		22

# Over 45 years continuous investment and experience

# Waste Water Treatment Services



A drive to help our clients improve efficiencies, reduce cost and maintain compliance is at the core of our waste water treatment service. With a proven track record of serving industrial, food and beverage, pharmaceutical and municipal customers across Ireland and the UK, we have the experience and processes to power more efficient and compliant waste water treatment plants.

#### Our services span the entire treatment process:

#### Waste Removal

- Grit & Screening Waste
- Fat, Grease & Oil
- Sludge.

#### Water & Effluent Testing & Monitoring

#### FOG Removal

#### **Biological Augmentation**

- Ammonia Removal
- Nitrate Removal
- Post Toxic Shock Recovery/Reseeding
- Anaerobic Digestion Optimisation.

#### **Bespoke Chemical Products**

- Coagulants & Flocculants
- Antifoams & Defoamers
- Phosphorous Removal
- Heavy metal Removal
- Nutrient Additives
- Settlement & Alkalinity Augmentation
- Odour Controls
- Sludge Conditioning
- Standard Commodity Chemicals.

#### Activated Carbons

#### Odour Abatement

#### Filtration

#### Sludge Services

- Dewatering
- Collection
- Treatment & Recovery
- Activated Sludge Monitoring & Management.

#### Industrial Cleaning

- Water Storage & Retention Tanks
- Clarifiers
- Aeration Basins
  - Digestors.

### Hazardous Waste Management

#### **Emergency Response**

Improving efficiencies and reducing costs for our clients



### **Biological Augmentation**

An in-depth knowledge of waste water treatment processes coupled with technical expertise across a range of industries allow us to diagnose issues and develop tailored biological augmentation solutions for our clients.

Our experienced teams then continue with dedicated follow up and monitoring. Our solutions include:

#### Ammonia Removal

We have introduced a new advanced range of microorganism which offers revolutionary removal of ammonia from waste water. Our product is the only natural product to initially metabolize ammonia through a novel biological process which is not nitrification. Significant changes appear in as little as 48-96 hours which compares favourably to the time lag normally associated with establishing or reestablishing the nitrifying bacteria mass, e.g. Nitrobacter and Nitrosomonas.

Our ammonia removal products are effective in extreme environmental conditions working in high and low temperatures and across a wide pH band.

#### Nitrate Removal

Excess nitrates can cause eutrophication and are toxic to aquatic life so they need to be removed from waste water. Our de-nitrifying bacterium ensures effective nitrate removal by converting nitrate to gaseous nitrogen, which is then released to air.

#### Post Toxic Shock Recovery/Reseeding

Changes in operating conditions such as loading, temperature, pH and the inherent characteristics of waste water can lead to adverse conditions for the microbiological population of the activated sludge system. The effects of operating parameters disruption can result in poor settlement, lower BOD breakdown, foam and scum build up; all of which can lead to compliance and efficiency issues.

Our biomass builder kits can be used as part of the overall remedy for many of these issues, assisting in the recovery of the activated sludge micro-organisms and the demise of unwanted bacteria and conditions. It is vital that these products are used in conjunction with identifying and resolving the source of the original problem.

#### Anaerobic Digestion Optimisation

We have introduced a new advanced range of microorganism for anaerobic digestion, providing optimal operation of anaerobic digestion, with over 90% COD removal and gas yields achieved. Our range of products contain extremophile micro-organisms that are effective in extreme environmental conditions operating in a broad pH and temperature range.



### **Bespoke Chemical Products**

Selecting the correct chemical product to optimise waste water treatment processes requires an in depth knowledge of the chemistry involved. Our team combines this expertise, years of experience and cutting edge technology to produce the right solution for every client.

#### Flocculants

Our range of waste water treatment chemicals include high activity inorganic coagulants, and low and high molecular weight polyelectrolytes. Our flocculants are available in cationic and anionic charges, emulsion or powder form.

#### Antifoams

The generation of foam can cause serious problems within treatment processes. Its existence presents difficulties in the operation of plants and can affect the quality of the finished product. If not properly controlled, foam can reduce equipment capacity and increase processing time and production cost.

Our solutions are designed both to counteract existing foam (defoamers), and also to prevent foam formation (antifoams). We provide concentrates and emulsions, in both technical and food grades, and we can also develop products for specific customer requirements.

#### Phosphorous Removal

Phosphorus is found in many different processes and effluent streams. Along with Nitrogen, it is grouped as a 'nutrient' which, when released into rivers and lakes, causes eutrophication or algal bloom.

By applying chemicals, phosphorus can be precipitated from process and effluent streams, and converted into a more manageable form. Products are supplied in both inorganic and organic forms as liquid precipitants and coagulants, designed to specifically target the phosphate (po4) ion and convert it to an insoluble form.

#### Heavy Metal Removal

Our products are designed using a range of chemistries to react with heavy metals in solution, and form insoluble precipitates. These can then be removed in solid form and disposed of safely. Through a series of laboratory tests, we identify the level and nature of heavy metal contamination and select the best treatment regime. This can include pH optimisation, co-precipitation techniques and the appropriate product application.

#### Nutrient Additives

Biological activated sludge is dependent on a healthy biomass that require both macronutrients and micronutrients to perform effectively. These elements are required at low or trace concentrations to promote the growth and activity of all bacteria, which perform the conversion of soluble organic material to biomass, carbon and water. Our range of nutrient products contains select ratios of Nitrogen, Phosphorus and trace elements. These elements are in a bio-available form and can be dosed to activated sludge tanks and are easily assimilated by the biomass.

#### Settlement & Alkalinity Augmentation

Our specialist range of waste water treatment chemicals includes inorganic suspensions designed to provide a nucleus around which floc forming bacteria can attach. In activated sludge systems where settlement is a problem, this can be the ideal solution. Our products provide alkalinity to the system, which can act as a buffer to pH shocks and also assists in biological nitrification and can also be utilised as a conditioning agent for sludge dewatering.

#### Odour Control

We supply a range of chemicals for the abatement of offensive odours e.g. hydrogen sulphides, mercaptans and ammonia. Our expert team assess the odour source to identify the most appropriate solution and subsequent effective application.

#### Sludge Conditioning

Many sludges, especially sludges which are low in inorganic content can be difficult to dewater using polyelectrolytes alone. The application of our chemical products allows us to manipulate the sludge charge more effectively, which in turn leads to more effective flocculation and dewatering.

The application of our products has increased dewatered sludge dry solids content resulting in significant savings in transport and disposal costs.

We also provide a range of food grade products, which are used to increase the efficiency of separation processes. Applications include fermentation, dairy processes and any food related separation technology.

#### Standard Chemical Products

We provide an extensive range of standard commodity water treatment chemicals such as ferric and alum salts, acids and bases.





### Odour Abatement

Odour emissions from industrial practices and waste water treatment plants are under continuous regulatory and public scrutiny. We have a range of odour abatement solutions, depending on the source and root cause of odour emission, to help companies remain compliant with their licence requirements.

#### Air Scrubbing Systems

We represent Tholander GmbH, a market leader in the design, installation, commission and aftercare of active air scrubber systems. Scrubber system types include chemical, water, biotrickling, activated carbon or a combination of scrubber types.

#### Photo-ionisation Systems

We are agents for Neutralox GmbH, a specialist manufacturer of cutting edge odour control equipment. Neutralox provides a physical-chemical treatment technology which does not require chemicals, has a small footprint, low operational and maintenance costs and is not sensitive to varying loads.

#### **Activated Carbons**

Activated carbons ensures the removal of specific VOCs and other organic contamination. We are Irish agents for industry specialists Jacobi Carbons.

#### Odour Control Misting & Dosing Systems

These systems are installed at the ground works stage of construction or as boundary spray barrier systems at sensitive sites.

#### **Odour Control Chemicals**

We supply a range of chemicals for the purpose of offensive odour abatement e.g. hydrogen sulphides, mercaptans and ammonia. Our expert team assess the odour source to identify the most appropriate solution and subsequent effective application.

### FOG Removal

Rapidly break down oils, fats and grease using Next FOG Stop.

Enva have partnered with Next Filtration UK to bring the NFS technology to the market. Rather than introducing foreign enzymes and bacteria as has been the traditional methodology in this area, Next FOG Stop is designed to stimulate the existing bacteria to rapidly breakdown fats, oils and grease present in the sewer and also to control hydrogen sulphide generation.

The formula is less costly and more sustainable when compared to expensive bacteria/enzyme treatments that generally provide short term local effects, but not long term benefits- particularly downstream of the addition points. If there aren't sufficient indigenous bacteria present, then there is a problem with the existing environmental conditions, adding bacteria and enzymes as a consequence is unlikely to have much effect.

Addition of the NFS product to sewer networks will breakdown existing FOG deposits and prevent the build-up of FOG in the sewage pumping station down stream of the addition point, indeed the benefits of the addition can work through to the sewage treatment works.

As a result of the biocatalytic affect of the NFS product on existing bacteria, addition to WWTW's provides operational

benefits. Results can vary from one treatment facility to another due to differences in plant design and operating conditions, however 10 to 30% reduction in MLSS Sludge production has been achieved on a consistent basis at wastewater treatment plants.

The formula's' molecular technology – a liquid formula containing an optimised array of fermentation-based yeast proteins, micronutrients and highly specialised surfactant chemistry needs to be dosed at only a few parts per million to stimulate the indigenous bacteria population and accelerate natural bio-degradation. This approach is much more effective than introducing foreign bacteria colonies into a sewer situation.

#### Benefits in Sewer Treatment

- Reduction in noxious gases
- Reduction is sewer blockages due to oils, fats and grease
- Reduction in pumping station corrosion and sewer collapses.

#### Benefits in WWTW's

- Increased BOD and Nutrient uptake
- Reduction in Sludge Generation
- Reduction in blower energy consumption
- Improved settlement.





### Sludge Management

We are fully committed to waste recovery, helping our clients to minimise their impact on the environment.

Our sludge recovery solutions are fully traceable and compliant. We transfer, treat and recover over 100,000 tonnes of organic material each year and manage large agricultural and forestry land banks.

Employing the latest technologies in composting, lime stabilisation, digestion and thermal treatment for the beneficial re-use of organic material, our recovered fertiliser is fully compliant with EU Standards and Good Practice Guidelines.

### Mobile Sludge Dewatering

We provide a range of sludge services for waste water treatment plants including dewatering, collection, treatment and recovery.

We ensure our clients run clean, efficient and compliant operations, while minimising their environmental impact. Onsite dewatering minimises the need for offsite transportation of sludge and reduces overall waste management costs.

We offer a range of mobile sludge dewatering options for dealing with waste water treatment, settlement pond and filter bed waste. Using AVC dewatering units, mobile decanters and mobile centrifuge plants, dewatering will result in a substantial volume reduction of sludge, with solid content ranging from 10% to 15% or higher in some cases.

### Activated Sludge Monitoring

Our water services team work with our clients to tailor solutions for the optimal performance of activated sludge processes.

Our process involves evaluating representative sludge and influent samples in our laboratory. The evaluations can range from standard analytical review to extended laboratory scale.

Our range of tests for analysing activated sludge include but are not limited to:

- COD & BOD
- Nitrogen
- Phosphorous
- pH & conductivity values
- Metals content
- Biomass DNA Testing
- Toxicity
- Dissolved Oxygen
- Solvent Screening of Influent
- MLSS, MLVSS & SVI.

Through interpretation of the reported results, Enva develops tailored solutions ranging from biological augmentations and bespoke chemical products to consultative advise on operational efficiencies.

Our experienced team continue to follow up with regular monitoring to ensure optimal performance and reduced costs.

# Water Treatment Services

We provide water treatment solutions that drive cost effective, efficient water treatment plants, while ensuring potable water supplies meet regulatory requirements.

Our expertise begins at the design and build phase of treatment plants and extends through to maintenance and operations.

We help our clients to operate efficient, cost effective plants by examining, testing and diagnosing plant operational problems and then producing detailed, actionable solutions. Once implemented, we monitor the results for continued effectiveness. Testing for a range of chemical and microbiological contaminants at our advanced laboratories, our technical teams ensure that drinking water is fully compliant and meets all regulations.

#### Our Solutions to Ensure Compliance Include:

- Water Grade Polymers
- UV Treatment
- Activated Carbons
- Filtration
- Alum Sludge Collection & Treatment.

We monitor the results for continued effectiveness



### **UV** Treatment

UV Technology is a widely used and recognised method for the disinfection of microbiological contaminants in drinking and waste water.

Enva has partnered with atg UV Technology, to offer a range of independently validated UV water treatment systems for guaranteed disinfection performance.

The range of products includes Low Pressure UV Systems, Low Pressure Amalgam UV Systems, Medium Pressure UV Systems and Integrated UV Skid Packages and Containerised Solutions.

# Our systems can be utilised to provide effective treatment within the following parameters:

- Flow Rates 5m3/hr 6000m3/hr
- UVT Ranges 49% UVT 98% UVT

Water treatment works across the world are investing heavily in ultraviolet water treatment technology as the threat of chlorine resistant parasites, such as Cryptosporidium and Giardia, continue to pose a serious risk to water companies and their customers. As industry leaders with considerable experience in supplying US EPA Validated UV systems for drinking water applications, atg UV Technology.

# Enva are well placed to support and advise drinking water companies on:

- System Validation
- Log Reduction
- RED Dose
- Installation into Existing Infrastructures, Upgrades & Retrofits
- On-Going Industry Regulation & Future Product Development.

Ultraviolet disinfection systems are used to ensure water is free from harmful organisms and is a proven, regulated and environmentally friendly technology. It does not affect taste, colour, or pH of the fluid being disinfected. Through testing of the water we can determine the transmission value of UV light; and in conjunction with flow rate analysis, known biological challenges, and treatment cycles; we can specify the appropriate system.

### Activated Carbons

With over 150 different activated carbons available within our range, we evaluate our client's specific requirements through laboratory analysis of spent material and analysis of the waste stream in both vapour and liquid phase.

This analysis allows us to specify a grade of activated carbon which will give the optimum performance on site followed by full technical support from our expert teams.

We provide activated carbon media to municipal, industrial and commercial customers, offering high quality virgincarbons for liquid and vapour phase applications.

## With our partner, Jacobi Carbons, we provide activated carbon solutions for:

- Water Treatment
- Air Purification
- Waste Water Treatment
- Colour Removal.

Odour Abatement

We also provide a range of reactivated carbons and specialty carbons for Pharmaceutical and Food Grade products. Reactivated carbons provide an economical, environmentally-friendly option for activated carbon users.

All activated carbon can be delivered in 500kg bulk bags or 20kg bags.

### Carbon Media Change-Out Services

We provide a full turnkey service of carbon supply, removal, refill and waste management through our licenced facilities.

This integrated approach minimises downtime and is extremely cost effective due to the use of a single contractor, responsible for all elements of the operation.

Providing a full turnkey service of carbon supply, removal, refill and waste management through our licenced facilities



### **Filtration Technologies**

We offer a wide range of filtration technologies and solutions for municipal and industrial applications for potable water and waste water.

This includes pre-filtration for MF, UF, NF and RO membranes, UV and tertiary treatment, and polishing.

Working with Amiad Water Systems, we provide the latest in innovative filtration technologies- screen, disc and microfiber self-cleaning filters. We offer manual, semi-automatic and fully automatic filters composed of polymeric and/or steel materials.

#### Suction-Scanning Screen Technology

Suction-scanning technology combines focused flush with automation to provide self-cleaning of a multi-layered stainless steel screen to ensure high efficiency filtration. The screen assembly allows the accumulating filter cake to be rapidly and totally removed and the suction-scanning technology uses less than 1% of the total process water for cleaning.

The self-cleaning cycle is triggered by the accumulation of suspended solids (filter cake) on the screen surface, as measured by the pressure differential. Therefore, cleaning is performed "as needed" - resulting in minimal water and energy waste. Suction-scanning technology eliminates the need for isolating the filter during the self-cleaning cycle. This focused cleaning and the minimal exhaust requirement allow for uninterrupted process flow.

#### Disc Technology - Spin Klin

Disc filtration solutions carry out depth and surface filtration leading to high particle holding capacity, effective cleaning and consistent filtration results. The unique disc filtration and backwash technology uses thin, color-coded discs of varied micron sizes. The discs are grooved on both sides, in opposite directions, creating a series of crossing points that trap the particles, thereby creating a depth filtration element. Each filter assembly in a multi-unit system is cleaned individually, allowing the other filters to continue operating during the backwash process.

#### Microfiber Technology

Textile fibres are widely used for fine filtration in the disposable cartridge filter market. The Amiad AMF2 filter uses fibre thread technology to create a self-cleaning filter system. Fine microfibers wound in layers around grooved plastic form the thread cassettes and provide filtration to a fine degree with an efficient self-cleaning system.

The newly developed filters are efficient for drinking water filtration, including the removal of cryptosporidium, as well as for swimming pools, reverse osmosis protection, cooling tower side stream filtration for legionella reduction, etc.

# **Cooling Tower Disinfection**

Cooling tower operators are responsible for the safe and efficient operations of the tower including the control of microbial growth (Pseudomonas aeruginosa and Legionella spp), biofilm build-up and the build-up of mineral deposits.

The most common approach to this problem is the use of a variety of chemicals- partially toxic, such as biocides, corrosion inhibitors and hardness stabilizers.

Enva, together with our partner Enviolet, can provide an effective alternative where the closed-loop water in cooling towers is conditioned by combining high energetic UVlamps with the addition of minimal amounts of hydrogen peroxide. The approach offers many technical and economic advantages.

#### Advantages of UV/H<sub>2</sub>O<sub>2</sub>:

- Reduced number & volume of Chemicals Required
- Reduced Corrosion or Increased Salt-Load
- Elimination of Bromine and chlorine based biocides
- No Build-up of Bio resistances
- No separate treatment of blow-down water required (No AOX)
- Lower Operating Costs
- Environmentally Friendly.

Ensure safe and efficient operations with UV disinfection and stabilisation



# **Process Water Disinfection**

In applications where microorganisms contaminate process water or where there is an active build-up of biofilm, this can lead to costly downtimes for industry.

Traditional methods for controlling microbiological growth in water tanks and pipework consist of regular chemical dosing, hot water sanitisation and constant microbiological quality monitoring.

However by utilizing advanced UV tank disinfection technology from Enva and our partner Enviolet, microbial growth is inhibited and there is no biofilm build-up. This chemical free solution results in increased plant productivity and decreased operating costs for all tanks with static and varying filling levels.

Our UV technology disinfects not only the complete internal space of the tank (water Volume and Head space), but also prevents regrowth and reinfection of the moist tank walls. Germs cannot develop resistances against UV irradiation and this process works without the negative side effects of biocides e.g corrosion, usage of toxic chemicals).

#### Typical Applications:

- Climatic chambers (scrubber and humidifiers)
- Cooling towers
- Food and beverage
- Pharmaceutical
- Chemical industry
- Surface technology
- Drinking water storage.

The system can be integrated or retrofitted into any tank size, shape or flow condition allowing your tank to be converted into a UV reactor.

# Water Testing & Monitoring

Enva's experienced scientists provide raw water testing, potable water testing, and waste water testing, to deliver tailored solutions for any water treatment problem.

Working closely with our customers, we also help to diagnose operating issues, as well as assisting in compliance with discharge licences.

Enva's integrated approach ensures that we can offer tailored solutions for any issues identified during testing and analysis. An in-depth knowledge of water and waste water treatment processes coupled with technical expertise across a range of industries allow us to diagnose issues and develop bespoke solutions for our clients.

Our experienced teams will then continue with dedicated follow up and monitoring.

#### Our Analytical Services Include:

- Discharge Licence Parameters- COD, BOD, Phosphorous, Nitrogen, OFG, Metals, pH etc.
- Biological Waste Water Treatment- MLSS, SVI, F:M Ratios, Microscopic Evaluation, Toxicity Studies, Nitrification Studies, etc.
- Toxicity Testing including Aquatic Toxicity Testing
- Water Content, Chloride, Suspended Solids, Ammonia, Conductivity & Calorific Value Testing.

Our experienced teams will then continue with dedicated follow up and monitoring

Gathering data and producing accurate drainage maps

## Surveying Services

#### Flow & Load Surveys

A flow and load survey is an essential requirement of any waste water treatment plant build. We provide full survey capabilities including flow monitoring, sampling, and chemical and biological analysis.

#### Impermeable Area Surveys

Our team of chartered engineers and GIS technicians undertake detailed surveys, providing you with a clearer understanding of the drainage of roofs, concrete and road surfaces, and other impermeable areas. We gather the data, interpret it and produce drainage maps that are used for effective sewer network and flood management.

#### **Topographical Surveys**

Full topographical surveys, utilising modern GPS and total station surveying equipment, delivering accuracy to under 5mm in locations and depths. The data can be interpreted and presented in any required format for asset management including CIS, GIS, AutoCAD or printed layouts and drawings.



# Drainage Networks

Enva provide tailored maintenance programs, regular cleaning and inspections for fully operational and licence compliant drainage networks.

We have a fleet of drain and sewer cleaning vehicles, which is supported by specialised equipment and resources necessary to undertake the works (incl. ATEX rated locations on any industrial / manufacturing facilities).

#### CCTV Drain & Sewer Surveys

We conduct quality drainage surveys of all pipe sizes and provide detailed reports. These surveys are carried out using our robotic camera systems, which are controlled remotely from our CCTV unit.

On completion of the survey, we provide a copy of our report, detailing the size, length and diameter of the pipe, along with defects (if any) graded and highlighted.



#### Drainage Rehabilitation Works

Where defects are highlighted in a CCTV Report Survey we can carry out the required rehabilitation works including:

- Patch Repairs
- Relining of Pipes
- Lateral Cutting

#### Pressure Testing of Lines

To meet the conditions of some licences, it may be necessary to carry out pressure testing of the network. This can be done either by way of a hydrostatic test or an air test.

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Integrated services covering all aspects of industrial cleaning

## Industrial Cleaning & Maintenance

The Industrial Services division of Enva specialises in providing a fully integrated service covering all aspects of industrial cleaning, through the provision of plant, labour, consultancy and project management services.

Integrated with Enva's ability to manage waste arising from all types of industrial sites, we provide solutions that encompass self-delivered waste treatment, disposal, containment, and recovery services.

#### General Maintenance & Cleaning

- Oil Interceptors / Separators
- Bund Cleaning & Testing
- Gullies & Sumps
- Wash Bays & Silt Traps
- Grease Traps
- Septic Tanks
- Industrial Floor Cleaning
- Industrial Roof Cleaning.

#### Tank Decommissioning

- Above Ground & Under
- Ground Tanks
- Tank Removal
- Tank Foaming.

#### General Tank Cleaning

- Sewage & Process Effluent
- Water Retention & Storage Tanks
- Anaerobic Digesters
- Hydrocarbon Tanks
- Chemical Tanks
- Food Grade Products
- Grease Tanks
- Bitumen Tanks
- Silo & Hopper Cleaning
- Wax Tanks
- Other Storage Tanks.

# Total Waste Management Solutions

#### Dry Waste

Our dry waste solutions can be customised to suit a wide range of industrial and commercial customers.

Depending on the type and volume of waste, we can provide containers with an appropriate capacity, either open or closed, and our specialised vehicles are available to collect waste as part of project work or on request.

Enva have a number of DGSA (Dangerous Goods Safety Advisor) qualified personnel on hand to give advice on the appropriate containers for the safe storage and transportation of the waste. Our drivers are trained to internationally recognised standard (ADR) for the carriage of dangerous goods.

We will provide all documentation and labels to our customers to ensure legal obligations are adhered to, while our bespoke tracking system will track all packaged waste from collection until final destination for recovery.

Our reporting system will provide full traceability and certificates of recovery are provided on request.

#### Liquid Waste

In addition to removal of waste from project works; we also offer a comprehensive service for the transport and treatment of industrial waste water that is reliable and environmentally responsible.

#### Typical wastes dealt with include:

- Oily water
- Leachate
- Waste water treatment plant effluent
- Sewage
- Grease waste
- Grey water.

Included in our extensive fleet is a hypalon (rubber) lined vacuum tanker, which was custom built for Enva to an extremely high specification.

#### It is suitable for the carriage of Hazardous Products:

- ADR class 8, including acids & caustics
- Sulphuric acid
- Ferric chloride
- Hydrochloric acid
- Aluminium chloride
- Phosphoric acid
- Ammonia solution
- Sodium hydroxide
- Hydrofluoric acid.





### **Emergency Response**

Enva has over 30 years' experience in offering emergency response service, designed to minimise the environmental impact of oil or chemical related accidents or incidents.

#### Emergency Spill Response Situations:

- Tanker Rollovers
- Spills into Rivers/Streams/Lakes
- Foreshore Remediation
- On-Shore Support for Marine Incidents
- Bund or Tank Ruptures
- Product Transfer Spill.

#### Hydrocarbon Emergency Response

Enva are vastly experienced in the area of hydrocarbon emergency response, with our response services covering rapid response and initial advice, containment and assessment of situation on-site, product recovery, specialist clean-up, soil remediation if required, and licensed treatment and disposal. All of these are backed-up by specialised fleet, equipment and personnel.

We are members of International Spill Accreditation Association (ISAA).

#### Chemical Emergency Response

Our chemical emergency response service is aimed at providing further peace of mind for chemical manufacturers, distributors and bulk waste producers within Ireland under the 'responsible stewardship' umbrella.

Working together with each client, Enva will tailor a HAZMAT procedure and service based on the type of chemicals involved and their associated risks and hazards. This service covers practical phone assistance (Level 1 response) to actual trans-shipment of bulk chemicals (Level 3 response) using specialised personal protective equipment (PPE) and other resources required for the chemicals involved.

#### What you can expect:

- Rapid Chemical & Oil Spill Response
- Fast, Professional Guidance
- Fast Containment of the Situation
- Expert Assessment of Clean-Up Options
- Maximum Product Recovery
- Complete, Specialist Clean-Up
- Expert Soil Remediation
- Complete Documentation.



Over 45 years continuous investment and experience

