Waste Disposal

Cost-effective and High-tech
Always on the Move
Lobbe is always on the move for a sound environment. Because waste of all kinds is created through the various aspects of private life and the public economy, and must be handled in ways that protect the environment – quickly, reliably, sustainably. For this reason, municipal waste must be meticulously sorted and valuable raw materials like glass, plastics, wood, paper and metals recovered and reintroduced to the production cycle. Remainders unsuitable for recycling are then used for power or heat production, or as supplementary fuels for industry. An efficient recycling economy requires a perfectly functional waste removal industry – one working at a high level of technical competence and with people bringing not only experience, but also a sense of responsibility for the environment.

Applied Knowledge
Years of experience on the regional level allow Lobbe to meld technical expertise with its employees experience and effort.
Applied Knowledge

Citizen-oriented and Professional

Guaranteeing safe disposal for citizens: Lobbe has proved its mettle over the course of decades as a highly qualified partner in this crucial task. As an authorised third party for communities and administrative unions, as well as contractual partners of the “Duales System Deutschland”, Lobbe makes important daily contributions on the path to reliable and affordable disposal. This ranges from the assignment of selected subcategories up to complete solutions interfacing with citizens. Comprehensive bodies of legislation such as the Recycling and Waste Disposal Laws and the Technical Guidelines for Municipal Waste (TASi, Technische Anleitung Siedlungsabfall) form clearly defined legal boundaries in this regard.

Consistent Forward Thinking

Lobbe is also consistently on a quest for sensible opportunities to optimise its services. At the forefront of such considerations are the continued optimisation of collection and hauling of municipal waste to promote the strict separation of waste types. Because the path from the waste disposal economy to resource economy is clearly defined.

The range of services for disposal of municipal waste runs from collection and hauling to sorting, recycling, purifying and removal and on to marketing of secondary raw materials – always supported by high-quality logistical and systems engineering. Through targeted material flow management, waste is directed into appropriate sorting and purifying facilities for recycling and the disposal of remainders. This all takes place either at in-house facilities, affiliated facilities or a set contingent of third-party facilities, all subject to a strict quality management to guarantee maximum disposal safety. At the same time, the value of the various waste types is maintained in a manner that makes the most ecological and economical sense. Contracting Lobbe to handle your municipal waste means building on safety, continuity and exemplary experience, including the operation of recycling yards and the use of mobile pollutant collection.
Industrial Waste

Improving efficiency and raising the quality of disposal is a goal toward which all services in the industrial waste removal industry are oriented. Particularly for Germany as a centre of commerce and industry, it is important for companies to take a future-oriented and economical approach to their internal waste removal logistics. Increased efficiency, cost reduction and support for the production process are the issues on the one side. Legal certainty, workplace safety and – viewed globally – environmental protection are issues on the other. Lobbe draws on these aspects to develop process-oriented waste management that uses the internal, production-dictated workflow to create a waste flow optimised for potential and cost.
Individual Concepts


Waste flow concepts are consulting services for corporations who wish to concentrate on their own core competencies. It is a recognition that just as these companies are specialists in the manufacturing and production of their specific products, so too is Lobbe a specialist in waste management. The starting point for the creation of an individualised waste flow concept is the holistic evaluation of waste generation through the production processes employed by the company. This is not primarily an evaluation of individual cost items, but rather a view of overall expenditures related to industrial waste removal — from goods inward to production and administration and shipping. The first step involves an analysis of waste flows and production processes. This then forms the basis of an evaluation in terms of cost effectiveness, adherence to the law, environmental protection and workplace safety. The company can then use that report to determine areas with significant potential for optimisation in terms of efficient implementation of personnel and internal logistics. From consistent separated collection of different waste types to systematically arranged collection points and on to the question of whether internal logistics tasks like container transport and transhipping of waste might be more cost effectively handled by a third-party service provider. A catalogue of potential steps, developed in cooperation with the customer, documents how process-oriented waste management can be achieved. Supplementary to the creation of a waste flow concept, Lobbe naturally also offers complete operative implementation of these same plans.

**Collection of Potential Recyclables**

Lobbe offers a broad spectrum of individual solutions for effective, economic collection and sorting of potential recyclables. Optimal recycling requires strictly sorted collection. The higher the quality of the various potential recyclables like glass, paper, plastic, metal or wood prior to the recycling process, the better the chances of achieving a sustainable recycling economy through market-ready products produced at the end of the process chain. Consistent plant-side waste separation also helps stabilise waste removal costs.
Lobbe is one of the highest profile providers of standard and specialty services in Germany in the area of special waste disposal. The group can handle a capacity of 200,000 tonnes annually of fluid special waste. One major component beyond its modern treatment facilities are the interim storage facilities designed to temporarily store waste. These locations break bulks into smaller batches, packaged and converted into transport-ready units. By request, waste can also be received outside the normal operational hours—a special service for our clients. This helps
Comprehensive Service

Industrial firms dispose of their waste immediately during downtime, and provides Lobbe with optimal operation freedom during catastrophe and industrial service assignments. Lobbe can dispose of solid and fluid special waste via disposal routes that can be retraced at any time, and with the highest of care. In-house facilities or a firm contingent of third-party facilities make the disposal economical and safe. Qualified consultation, modern vehicles, efficient facilities and optimally equipped laboratories: the Lobbe group of companies offers everything under one roof.

Qualifications and Technology

Special waste represents particular challenges for the waste removal industry. Given the strict legal framework conditions, expertise and safety are of primary importance. Alongside the legally prescribed training sessions, Lobbe also consistently invests in the improvement of the qualifications of its employees through constant internal and external continuing education. This guarantees that Lobbe clients are afforded qualified consultation and care, with services provided that conform to the law even as they remain economical.

On the technical side, we possess an extensive palette of specialised vehicles: high-security suction pressure vehicles for corrosive and poisonous materials (alkalines, acids and mixtures); suction pressure vehicles with 10 to 25 cubic meters tank volumes for oils, emulsions and other fluid special wastes; suction pressure vehicles with water reserves for cleaning on location. Also held constantly ready for use are special vehicles for the transport of special containers, as well as roll-off tippers and tipping container vehicles with containers from 5 to 40 cubic meters of storage. The technical equipment corresponds to the requirements of the ADR, the European Agreement concerning the International Carriage of Dangerous Goods by Road. Comprehensive, strict security regulations apply.
Chemical Analysis
Scientific Basis

Third-party Monitoring Agencies at the Operations Level

Chemical analysis is the scientific foundation of special waste disposal. The sampling and analysis of incoming and outgoing special waste, as well as comparisons with third-party analyses, are the most important instruments for operational inspection offered by the Lobbe laboratories. The Lobbe laboratory based in Iserlohn-Letmathe has achieved the status of an accredited laboratory based on § 25 of the North Rhine-Westphalia Waste Disposal Act and is a recognised examination centre based on the regulations for waste oil. This involves inspecting the waste based on DIN, DEV and EN ISO procedures. The services involve analysis of declarations as stipulated by the Waste Disposal Guidelines for chemical and physical treatment, burning and sanitary landfilling; waste oil analysis based on the regulations for waste oil; wastewater analysis based on the indirect inducer regulations; soil, construction waste and sludge analysis. The procedures are subject to constant analytical quality assurance methods.

Service Overview Chemical Analysis

Chromatographic Determinations
- Polycyclic aromatic hydrocarbon (PAH)
- Polychlorinated biphenyl (PCB)
- Chlorofluorocarbons (CFC); Benzene, Toluene, Ethylbenzene, Xylenes (BTEX); highly volatile halogenated hydrocarbons; pesticides
- Gas chromatography-mass spectrometry (GC-MS)

Determination of sum parameters
- Organic halogens subject to absorption (AOX)
- Extractible halogen-organic compounds;
- Total Organic Carbon (TOC)
- Chemical oxygen requirements (COR);
- Phenol index
- Total chlorine and sulphur
- Heavy metals

Guidelines for chemical and physical treatment, burning and sanitary landfilling; waste oil analysis based on the regulations for waste oil; wastewater analysis based on the indirect inducer regulations; soil, construction waste and sludge analysis. The procedures are subject to constant analytical quality assurance methods.

Ion determinations for nitrite, nitrate, sulphate, chloride, cyanide, ammonium, etc.

Physical parameters
- Investigations of ignition point and calorific value
Incineration Plant Iserlohn

A cooperative agreement with the Iserlohn refuse heating and power plant allows Lobbe to offer long-term assurance of high-grade waste disposal. The facility’s three boiler lines can convert up to 295,000 tonnes of waste annually into energy and district heating. Following on extensive technical modernisation in the mid-90s, the refuse heating and power plant is considered one of the most modern in Germany.

Commercial Waste Sorting Facility

With the “Technische Anleitung Siedlungsaufall” (TASi, Technical Guidelines for Municipal Waste) coming into effect in June 2005, the separation of waste for disposal has grown immensely in importance. Lobbe reacted early to the stipulations posed – here – the recently expanded and modernised commercial waste sorting facility in Iserlohn-Sümmern can handle 60,000 tonnes annually and works with the most modern of sorting technology. Three automatic sorting units assure an extreme depth of sorting. Through strict separation of potential recyclables on the one hand as well as the production of qualitatively high-class supplementary fuels on the other hand, the materials cycle is closed and market-ready products are created for industry and power plants.

Sorting Plant for Paper, Paperboard and Cardboard

The sorting plant for paper, paperboard and cardboard in Bergneustadt processes 47,000 tonnes of used paper annually from the communities and commercial collection. The facility removes non-paper components, sorts the remaining mixed raw materials based on European standards for used paper types, and then presses and sends it back into the production cycle.

Trash Purification

The purification plant in Castrop-Rauxel makes its contribution to the recycling economy by handling waste from the paper industry. It has a capacity of 30,000 tonnes annually. Screenings
Modern Technology

are separated into metal, foil and fibre components and processed in a multi-step purification process, or else redirected for potential material reclamation.

Organic Waste Composting Facility
Lobbe holds a 50 percent share of the waste disposal centre in Olper. That location handles organic waste composting, with an annual capacity of 58,000 tonnes. There are separate production lines for the creation and successful marketing of mulches, barks and chips.

CP Facility
In-house chemical/physical facilities Bielefeld, Espenhain and Iserlohn are available for the treatment of the most varied of fluid special waste types.

Special-waste ready interim storage depots conforming to all applicable laws assure comprehensive storage capacity.

Soil Remediation Facilities
Lobbe’s soil remediation centres work with contaminated soil that has suffered acute damage or that is schedule for rehabilitation. Beyond contaminated soil, it can also accept other waste types that are to be treated organically, such as sludge from petroleum wells. A mechanical/biological pre-treatment of waste is also possible.

Neutralisation Facility
Lobbe accepts fluid acids such as those used by the photovoltaic industry for surface treatment at its neutralisation plant in Espenhain (near Leipzig) facility.

The special facility works as a closed system corresponding to the most current technical and legal security requirements. 10,000 tonnes of fluid acids are processed each year in Espenhain.

Thermal Desorption
Rositz is the site of Lobbe’s modern waste treatment centre with a thermal desorption plant, interim storage and an administrative wing. Thermal desorption is specially designed for the treatment of highly polluted soil. This includes soil affected by mercury pollution, among others.