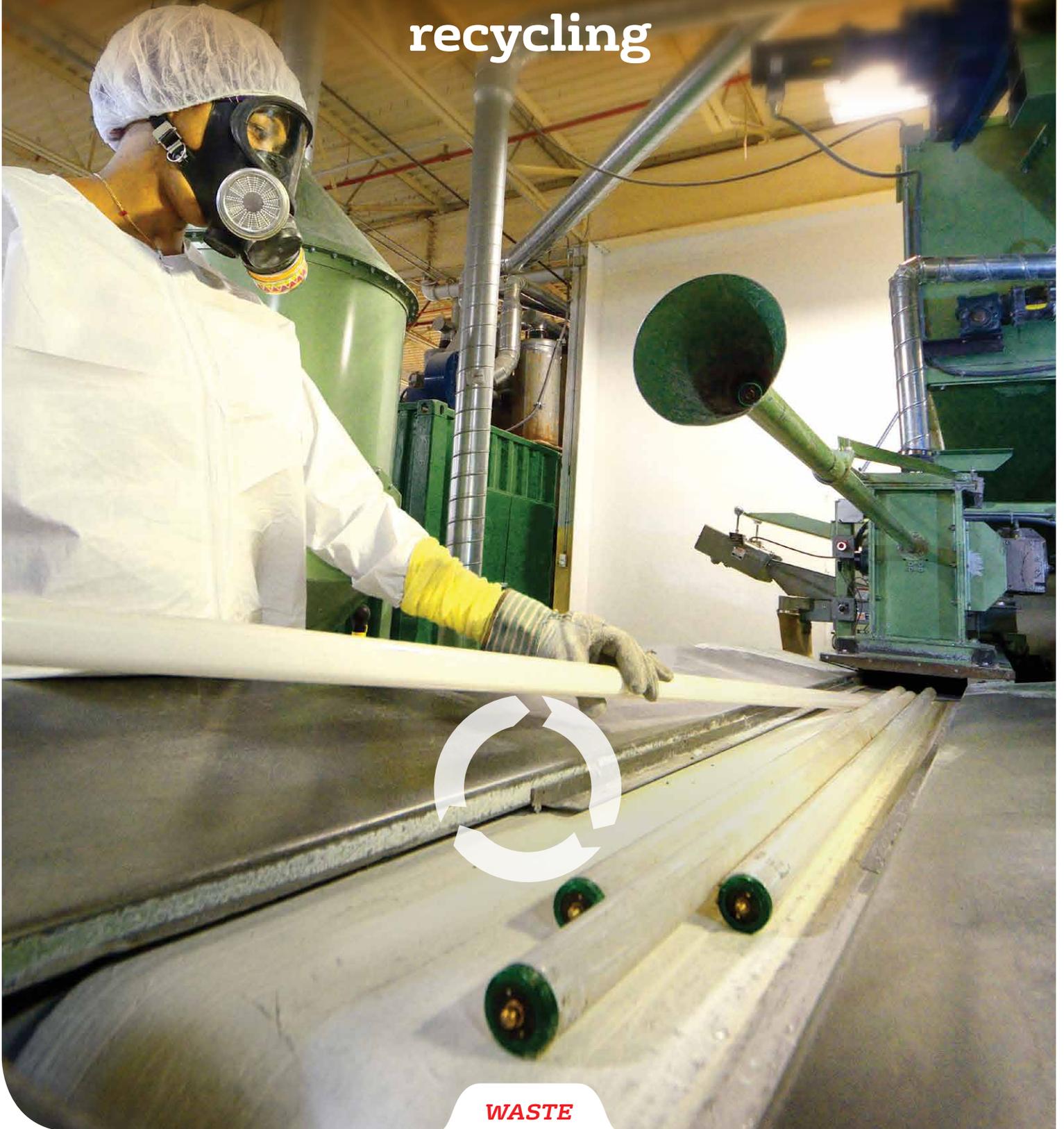


# Lighting and electronic waste recycling





## Defining environmental sustainability

To meet the needs of the present generation without compromising the ability of future generations to meet their needs.



# A commitment to sustainable development

## **Working on behalf of the environment – How Veolia is resourcing the world**

- We help develop sustainable access to water, energy, and raw materials and resources.
- We help preserve resources through sustainable processes.
- We help replenish resources.

## **Seizing opportunities in a changing market**

The long-term viability of our company depends on our ability to provide what you want.

You want efficient, high-quality, safe services for hazardous and non-hazardous waste that comply with complex and ever-changing environmental regulations.

More companies choose Veolia to manage their environmental risk than any other company in the world. Our personnel are experienced in developing innovative solutions that break new ground in the recycling marketplace. We recycle waste streams with the utmost care and in a cost-effective and efficient manner. In fact, recycling by definition is sustainable.

## **Developing recycling solutions**

Thousands of companies across the country have contracted with Veolia to help them manage and implement recycling programs that keep them in compliance with regulations. In the process, we've reclaimed valuable ferrous and non-ferrous metals as well as hazardous materials, such as mercury. Our recycling by-products are reused, whenever possible, as raw materials in the manufacturing of new products.

# Recycling is more important than ever

**Why?** Because recycling turns materials that would otherwise become waste into valuable resources. Veolia regards waste as a resource. Your waste provides energy and raw materials. By recycling waste, we contribute to reducing pressure on fossil resources, reducing costs and protecting our environment.

The world is facing both continuous growth in the amount of waste generated by human activities and the rising scarcity or depletion of natural resources. Under these circumstances, we must increasingly focus on recycling and reusing waste rather than on disposal. The conversion of waste into a resource is essential to mitigate the scarcity of resources and continue sustainable growth, as well as to protect the planet's natural equilibrium.

In some states, there are legal alternatives for managing hazardous waste, like treatment, incineration or licensed hazardous waste landfills, in addition to recycling. But none of these options provides the added environmental benefits that are inherent to recycling.





“Veolia displayed a unique ability to help both Grainger and Grainger Customers with their ongoing customer service. Their outstanding response time has helped grow future opportunities for both companies. Their experience and knowledge has been a valuable asset to our field representatives and are of great value to any company.”

Michael Senol  
Product Manager  
Grainger Product Services

# Recycling protects the environment from hazardous materials

## **Lamps, batteries, ballast, electronics and computer equipment**

usually contain mercury, lead and other heavy metals, polychlorinated biphenyls (PCBs) or other harmful materials, all of which are considered toxic and hazardous to human health and the environment. The federal government and all 50 states have enacted rules and regulations to address the proper management of these materials. Failure to manage these items in accordance with regulations may put you and your company at risk as well as endanger public health.



## **MERCURY**

Mercury has traditionally been used in electrical devices, precision instruments, medical apparatus, and in conjunction with other elements to form compounds for industrial applications. Despite its widespread use, mercury is considered a hazardous material that needs to be disposed of properly once it is removed from its original use. Improperly disposing of mercury may lead to contamination of the air, rivers, lakes and drinking water, thus increasing risk to the environment and human health. Mercury contamination and exposure has been linked to cardiovascular diseases, mental retardation and neurological disorders.

## **LEAD**

Lead is a highly-toxic metal that was used for many years in products such as CRT monitors and can be found in and around our homes. Lead may cause a range of health effects, from behavioral problems and learning disabilities, to seizures and death.

## **PCBs**

Polychlorinated biphenyls, or PCBs, were traditionally used in electrical applications and may be found in electrical equipment such as transformers, ballasts, capacitors, circuit breakers, switches, bushings and cable. PCBs were widely used as a fire insulator because of their ability to withstand exceptionally high temperatures. Concern over the toxicity and persistence in the environment of PCBs led Congress in 1976 to enact the Toxic Substances Control Act (TSCA) that included, among other things, prohibitions on the manufacture, processing, and distribution in commerce of PCBs. PCBs have been shown to cause cancer in non-cancer health effects in animals, including effects on the immune system, reproductive system, nervous system, endocrine system and other negative health effects. Studies in humans provide supportive evidence for potential carcinogenic and non- carcinogenic effects of PCBs.





“When we began discussions with Veolia, we were pleased with the flexibility their company offered to tailor the program to our multiple needs. Furthermore, it has been such a joy to work with their team. They are welcoming of suggestions, quick to respond, and proactive in developing new ideas and products.”

Jennifer R. Dolin,  
Manager of Sustainability and  
Environmental Affairs  
Osram Sylvania

# Compliance is non-negotiable

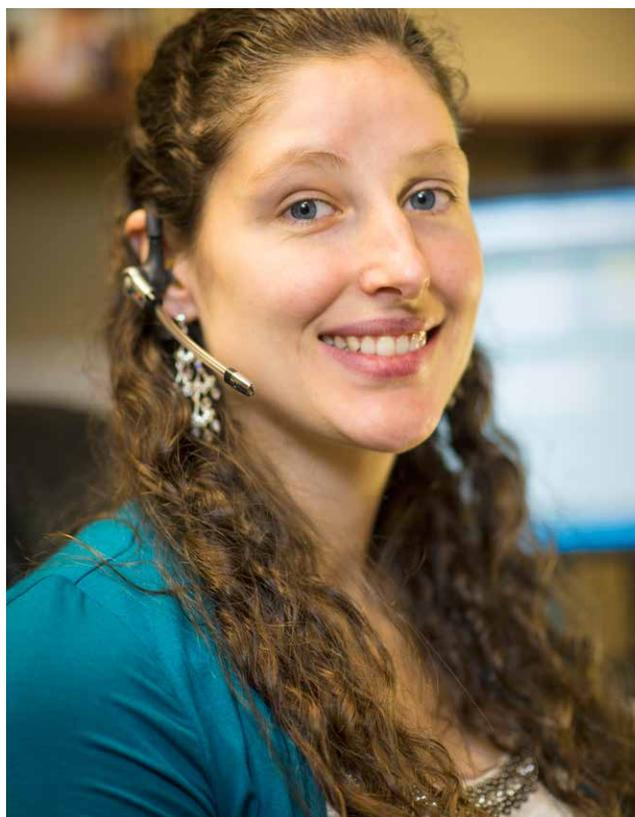
**We take environmental compliance seriously** and continually work to improve our processes to ensure our promise of managing your waste in an environmentally-compliant manner. Our recycling solutions are designed to minimize risk to our staff, your staff, the public and the environment. Our trained technicians adhere to the latest regulations and practices to ensure strict measures of compliance are followed. When it comes to our fully-permitted facilities, we regularly self audit and have established goals of obtaining OSHA VPP or ISO certification.

Managing waste in a non-compliant manner can affect you not only financially, but also from a public-relations standpoint. As a generator of toxic and hazardous materials, you are financially responsible for the proper management, recycling and disposal of your waste and for cleaning up the effects of improper disposal. Improper disposal can often lead to negative publicity. For this reason it is important that when choosing an environmental company your evaluation should include an assessment of their risk management offering and compliance systems.

## Regulations that govern compliance

There are major federal rules and regulations governing the disposal and handling of toxic and hazardous materials found in today's lighting and electronic waste, such as:

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- Resource Conservation and Recovery Act (RCRA)
- Toxic Substances Control Act (TSCA)
- Universal Waste Rule (UWR)



## Understanding “Superfund”

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is commonly referred to as “Superfund.” Superfund is the Federal government’s program to clean up the nation’s uncontrolled hazardous waste sites. Under Superfund, Potentially Responsible Parties (PRP’s) may be held financially responsible to fund the clean up. Under Superfund, there is no small quantity exemption from liability for future site clean up if contamination is found at a disposal facility. No contract, indemnification or any other agreement can remove this potential liability from any of the original waste generators.

## Resource Conservation and Recovery Act (RCRA)

RCRA gave the Environmental Protection Agency (EPA) the authority to control hazardous waste from the “cradle-to-grave.” This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. Under Subtitle C of RCRA, hazardous waste must be properly identified, stored, transported, treated and disposed of.

## Toxic Substances Control Act (TSCA)

PCB-containing materials are one of the compounds regulated under the Toxic Substances Control Act (TSCA). Some of the aspects governed by TSCA include labeling, registrations, inspections, reporting requirements, cleanup standards, storage, record keeping, shipping and proper disposal.

## Universal Waste Rule (UWR)

The universal waste regulations streamline collection requirements for certain hazardous wastes in the following categories: batteries, pesticides, mercury-containing equipment, thermostats and lamps. The rule is designed to reduce hazardous waste in the municipal solid waste (MSW) stream by making it easier to manage the recycling of these items. The rule allows states to enforce stricter policies in regards to universal waste. Some states have added other wastes to their universal waste rule, including CRTs and lamp ballast.

“We feel that Veolia’s service and support has exceeded our initial expectations, and we would highly recommend them. If you are considering launching a lamp recycling program, look no further than to Veolia to ensure your program runs smoothly, the lamps collected are recycled, and the mercury is reclaimed by the largest environmental company on the planet.”

Bogdan Kowalczyk  
Project Designer  
Citywide Environmental Services LLC

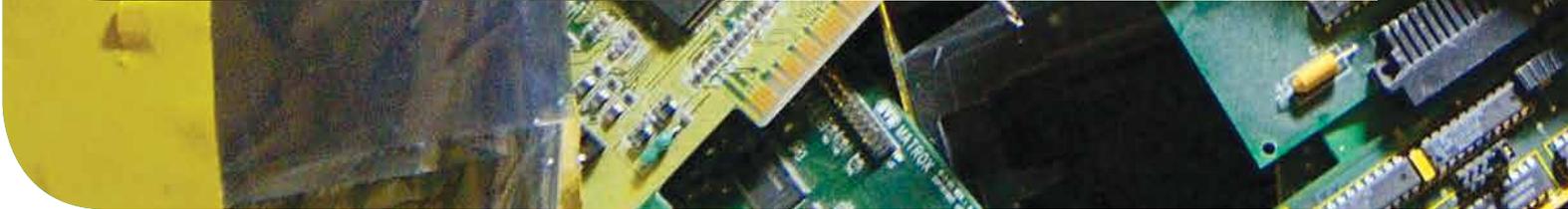
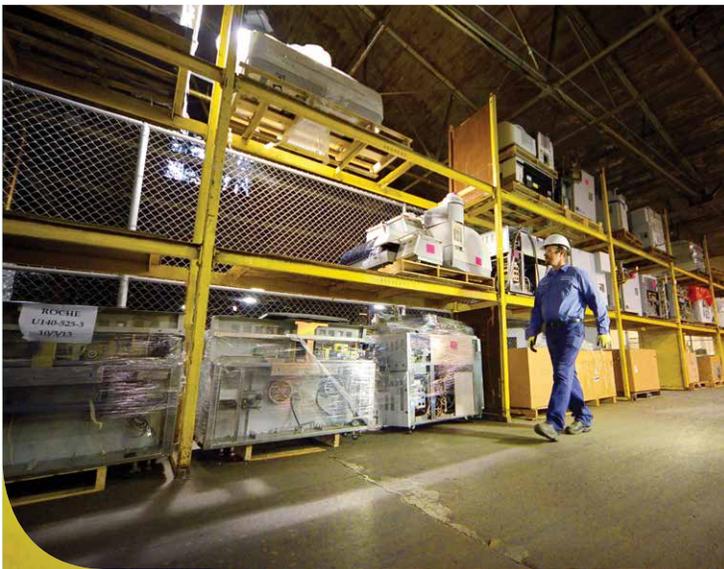


# We protect your long-term liability

**For more than 160 years,** we've been delivering environmental solutions to our customers. We started providing water services to towns and cities. Today, our parent company and its affiliates provide a complete range of services for water, waste and energy.

In North America, our history dates back more than 30 years when our founding company started providing hazardous and non-hazardous waste services. Today, Veolia provides services nationally from more than 45 service and sales offices located in 24 states. Together, Veolia operates over 300 facilities throughout North America.

During that time, we've come a long way. In fact, we've pioneered many of today's recycling technologies and in the process have become one of the largest fluorescent lamp recycling companies in the world. With the financial backing of Veolia, you can rest assured that we'll be here, protecting your long-term environmental and financial liability now and in the future.



## **The facts on low mercury or “green tip” lamps**

Low mercury, or “green tip”, lamps still contain small amounts of mercury. Recycling all mercury lamps is recommended. Under Superfund, there is no small quantity exemption from liability for future site clean up if mercury contamination is found at a disposal facility.

## **Indemnification & liability protection**

Veolia offers customers a strong indemnification provision with written service agreements that help protect you from financial costs resulting from potential mismanagement of your waste. Our contract is backed by the financial stability of a 160-year old firm with more than \$31 billion in revenue.

When it comes to insurance, Veolia’s offering is second-to-none. In fact, our insurance coverage is up to 50 times that of some of our competitors. But that’s not all, our insurance is underwritten by leading insurance companies. Together our package offers the peace-of-mind you deserve when managing your waste.

We invite you to perform a full risk-management review. Inspect our permits, licenses, operating procedures, health and safety plans, waste-tracking/chain of custody procedures, closure plans and regulatory compliance history. We welcome a site audit of any of our facilities and hope you perform background checks with federal, state and local environmental and safety agencies. We are confident you’ll like what you see.

## **Turning waste into a resource - reduce your exposure**

By recycling lighting and electronic waste, we help you minimize long-term liability by reusing waste as raw materials in the manufacturing of new products.

Last year our electronics recycling group recycled and reused over 5,500 tons of glass from lighting and computer products, nearly 2,500 tons of ferrous and non-ferrous metals and reclaimed over 9 tons of mercury. As a result of recycling we also generated and recycled over 225 tons of plastics and 625 tons of cardboard.

## **Resourcing the world.**

Economic globalization has led to some companies exporting hazardous materials and toxic computer waste to non-audited recyclers operating in developing countries.

At Veolia, we believe in a cleaner life cycle and managing waste in a way that minimizes impact on people and the environment. We believe that where there’s waste, there’s a way to recycle it using audited and approved vendors, reuse it and thus turn waste into a resource.



# Delivering cost-effective recycling solutions

**We offer our customers a variety of cost-effective solutions** for large and small quantities of lighting and electronic waste. Our bulk recycling programs are designed for larger quantities of waste such as pallets or truckloads shipped on a regular basis. Customers that benefit from our bulk services include those re-lamping or retrofitting a facility, large quantity generators, national retailers and environmental brokers.

For smaller quantities of waste, we offer our unique, all inclusive, prepaid ship-back programs; RECYCLEPAK® for fluorescent lamps, ballast, batteries and mercury waste, and SHARPS+PAK® for regulated medical waste sharps. Our small quantity programs were designed by environmental health and safety experts and offer an efficient means for small to medium sized companies to comply with disposal regulations.

## Packaging

We provide our customers with a variety of packaging including boxes for all sizes of lamps, cubic yard boxes, 55 gal drums, poly pails and even drop trailers to store your waste materials. Depending upon your needs, we can ship the materials to your location, deliver the

materials during your next pickup or deliver supplies to your project site. We offer our customers safe packaging and guidelines to ensure your materials are packaged for safe and compliant shipment to our facility for recycling.

## Transportation

We transport waste every day. Whether it's hazardous or non-hazardous, procedures are followed to ensure your materials are delivered in a safe and timely manner. From less-than-truckloads (LTL) to full trailers, we help customers cost-effectively move materials from the source of generation to processing. Veolia operates 36 10-day in-transit facilities complimented by a fleet of company-owned van trailers, flat beds, and tractor trailers and supported by a detailed audited and approved network of third party transporters. Whatever waste you generate, we can help transport it.



## OUR SERVICES

### MERCURY LAMPS

- Straight fluorescent
- Compacts (CFL), u-shape and circular
- High intensity discharge (HID)
- Neon
- Shatterproof
- Other specialty types

### MERCURY WASTE

- Fluorescent and HID lamps
- Electrical devices
- Precision instruments
- Medical apparatus
- Mercury compounds
- Dental amalgam
- Debris

### BATTERIES

- Alkaline
- Lead acid
- Lithium
- Lithium ion
- Mercury
- Nickel-cadmium
- Nickel metal hydride
- Silver
- Zinc carbon

### LAMP BALLAST

- Fluorescent
- Metal halide
- HI pressure sodium
- LO pressure sodium
- CFL
- Electronic HID
- PCB
- Non-PCB
- DEHP

### E-WASTE

- Monitors/cathode ray tubes (CRTs)
- Personal computers
- Components and peripherals
- Printer/fax/copiers
- Mainframes and servers
- Consumer electronics
- Telephone systems
- Office and medical equipment
- Generators, wire and motors
- Specialty medical device and diagnostic equipment

### ELECTRICAL EQUIPMENT

- Transformers
- Regulators
- Capacitors
- Circuit breakers
- Re-closers
- Switch gear
- Bushings
- Arrestors
- Wire, cable and oil



Veolia provides a full range of hazardous and non-hazardous waste services. Our electronics recycling group manages and processes a variety of materials generated from just about every market sector. If you have a different waste stream, give us a call, we can help you recycle it.

For a complete list of services, visit [www.veolianorthamerica.com](http://www.veolianorthamerica.com).



**RECYCLEPAK**

VEOLIA

888.669.9723

## Why work with Veolia?

### Managing hazardous & non-hazardous waste

When you manage multiple environmental responsibilities and their associated liability, you must rely on the capabilities and expertise of your service provider. From on-site pick-up to final treatment or disposal, Veolia assures regulatory compliance by channeling hazardous and non hazardous waste and related information through its network of over 300 company-owned or certified service centers nationwide. These service centers include treatment, recovery and disposal facilities, sales offices and transportation locations.

### Innovation and technical expertise

Veolia has the only research and development program in the world dedicated to environmental services. This program develops technical innovations for non hazardous and hazardous waste processes, recovery and disposal, supporting Veolia's commitment to environmental sustainability. As a result, our account, project and technical representatives understand lighting and electronic waste. They are ready to assist you in any way, from providing information about government regulation and answering technical questions regarding treatment alternatives, to training your employees and setting up disposal programs that save you time and money.

### Environmental compliance

Veolia maintains an excellent record of compliance with regulations governing health and safety and the environment. This record is ready for inspection at any time. A culture of compliance is a way of life at Veolia, where we manage hazardous and non hazardous waste with the utmost care. We follow procedures meticulously with our on-site teams, and continue to focus on the details throughout transportation, treatment and disposal.

### Financial strength

Veolia is a publicly-owned company with 160 years of experience delivering environmental solutions. Veolia designs and delivers services that are vital to human development and sustainable performance through three complementary business activities: water management, waste management and energy services. The company provides innovative, sustainable solutions to improve people's everyday lives and protect future resources. With over \$31 billion in revenue, we are the largest environmental services company in the world.



**RECYCLEPAK**



**RECYCLEPAK**

888.669.9723

www.veolia.com

MIXED LAMPS RECYCLING PAK

# PARTNERING WITH VEOLIA NORTH AMERICA

We offer a broad service portfolio to support the environmental management needs of industry across North America. Our capabilities include industrial cleaning and maintenance, hazardous and regulated waste and resource management, and technology-driven solutions for processing, treating and recovering industrial water and wastewater.

Veolia North America's team includes 7,800 environmental experts who are committed to delivering solutions that preserve, replenish and effectively manage our planet's natural resources. Our operational and technical teams are trained far beyond regulatory requirements, and bring thousands of years of collective experience to your business.

Our operational expertise is further demonstrated by Veolia's industry-leading safety performance and compliance ratings that you can trust to mitigate risk from your business. With 13 OSHA VPP Star-Certified sites, plus additional sites pursuing certification, we are the most VPP-certified environmental services provider in North America.

When you work with Veolia, you gain access to the human, technical and operational resources, innovative solutions, and efficient service delivery that you can only expect from a world leader and preferred provider of environmental solutions.

## COAST-TO-COAST COVERAGE

### Corporate Office

Veolia North America  
Industrial Business  
53 State Street  
Boston MA 02109  
Tel: +1 713 672 8004

### Electronics Recycling Group

#### Wisconsin

1275 Mineral Springs Drive  
Port Washington, WI 53074  
Tel: +1 262 243 8900; Fax: +1 262 284 3775

### Electronics Recycling Branch Facilities

#### Arizona

5736 West Jefferson  
Phoenix, AZ 85043  
Tel: +1 602 233 2955; Fax +1 602 415 3030

#### Massachusetts

90 Pleasant Street  
West Bridgewater, MA 02379  
Tel: +1 774 296 6030; Fax +1 774 296 6040

#### Florida

342 Marpan Lane  
Tallahassee, FL 32305  
Tel: +1 850 877 8299; Fax +1 850 878 3349

#### Pickering, ON

820 McKay Road  
Pickering, ON L1W 2Y4  
Tel: +1 800 461 3267

Call toll-free nationwide:

# 1-800-556-5267



Resourcing the world

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