Our Environmental Accomplishments

Lead Smelting
Our EPA- and Pennsylvania Department of Environmental Protection-permitted lead smelter recycles over 200 million pounds of lead per year.

Acid Reclamation
East Penn’s acid reclamation plant was the first in the industry. This patented process recycles millions of gallons of acid each year, diverting hazardous waste from landfills.

Plastic Recycling
Plastic battery cases and covers are cleaned, ground, and remolded into new battery cases and covers, recycling over 11 million pounds of plastic per year.

Environmental, Health & Safety Certifications, Awards, and Recognitions
• Entire 520-acre complex certified to ISO 14001:2015 environmental requirements
• Environmental Protection Awards for Outstanding Environmental Excellence
• American Society of Safety Engineers (ASSE) Industrial Safety Award
• Environmental Stewardship Award, Pennsylvania Institute for Children’s Environmental Health
• Pennsylvania Water Environment Association – 2014 Industrial Waste Excellence Award
• Pennsylvania Water Environment Association – 2014 Industrial Waste Excellence Award

Our Environmental Protection Plan

Recycling Capabilities and Environmental Accomplishments

WHO WE ARE
Since day one, East Penn has made recycling an everyday practice. East Penn opened its doors as a battery rebuilding company almost three quarters of a century ago. Today, the company has never stopped building on its expertise, infrastructure, capabilities, and commitment. This continuous commitment has made us the most progressive manufacturer in environmental protection and technologically advanced battery recycler throughout the entire industry. It also continues to give our customers the critical reassurance of safe battery recycling without the worry of debilitating fines, penalties, or paperwork associated with hazardous waste disposal laws.

WHAT WE’VE DONE
The centerpiece of East Penn’s commitment to the environment can be found in our product stewardship principles that include a continuous product life-cycle approach. At our state-of-the-art recycling facility, we process approximately 3,000 batteries per hour, running a computer-controlled, closed-loop system, co-located with our manufacturing facilities, recycling virtually 100 percent of each spent battery received for processing. Each of the three major battery components (lead, plastic, and acid) are safely recycled and used in making new energy storage devices.

WHERE WE’RE GOING
East Penn continues to lead the industry through innovative recycling, environmental protection, and proactive continuous improvement. The company is always helping to make “green” campuses with new breakthroughs in advanced battery products. These products are used mainly in Hybrid Electric Vehicles, Renewable Energy Integration, Smart Grid Services, and other power solutions that are highly recyclable, conserve energy, and reduce CO2 emissions.
Our Environmental Protecton Plan

Our Environmental Accomplishments

Our EPA- and Pennsylvania Department of Environmental Protection-permitted smelter recycles over 200 million pounds of lead per year.

Lead Smelting

Acid Reclamation

Plastic Recycling

Plastics in batteries and cans are cleaned, ground, and mixed with other plastics for use in molded-in parts and cans. The acid recovery facility has over 11 million pounds of plastic per year.

Environmental, Health & Safety Certifications, Awards, and Recognitions

Recycling Capabilities and Environmental Accomplishments

Our Environmental Protection Plan

East Penn Station, Pennsylvania 19536-0147
www.eastpennmanufacturing.com
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WHO WE ARE

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WHAT WE’VE DONE

The centerpiece of East Penn’s commitment to the environment can be found in our product stewardship principles that include a continuous product life cycle approach. At our state-of-the-art recycling facility, we process approximately 30,000 batteries per day. Our computer-controlled, closed-loop system, co-located with our manufacturing facility, recycles virtually 100 percent of each spent battery received for processing. Each of the three major battery components (lead, plastic, and acid) are safely recycled and used in making new energy storage devices.

WHERE WE’RE GOING

East Penn continues to lead the industry through innovative recycling, environmental protection, and proactive continuous improvement. The company is also helping to make a “greener” consumer with new advancements in advanced energy products. These products are eventually sold in Hybrid Electric Vehicles, Renewable Energy/Smart Homes/Smart Grid Services, and other power solutions that are highly recyclable, conserve energy, and reduce CO2 emissions.

Plastic Recycling

Plastics in batteries and cans are cleaned, ground, and mixed with other plastics for use in molded-in parts and cans. The acid recovery facility has over 11 million pounds of plastic per year.

Environmental, Health & Safety Certifications, Awards, and Recognitions

• Entire 520-acre complex certified to ISO 14001:2015 environmental requirements
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• Healthcare Heroes – 2014 Corporate Achievement Award by Lehigh Valley Business
• Pennsylvania Water Environment Association – 2014 Industrial Waste Excellence Award
Reclaiming Resources

A Closed Loop System of Sustainable Reuse

Lead
- Lead is reclaimed from spent batteries.
- The reclaimed lead is used in the manufacture of new batteries.

Plastic
- New cases and covers are made from 100% recycled plastic materials.

Acid
- Sulfuric acid is reclaimed from spent batteries for use in new energy storage devices.

Environmental Protection Agency and the Pennsylvania Department of Environmental Protection standards. Excess heat from our manufacturing facilities is used to warm adjacent manufacturing facilities in cold weather. Sulfur fumes generated in the furnace are redirected through a radiator system to warm adjacent manufacturing facilities.

East Penn produces a liquid fertilizer solution from the sulfur fumes created during lead smelting. This solution is used to make fertilizer for agricultural use. Over 24,000 tons of this solution is sold to make fertilizer for agricultural use each year.

Lead • Plastic • Acid

These three major components: lead, plastic, and acid, are recycled and reused in the production of brand new products.

Recycled lead is used in the production of all types of new energy storage devices. At the acid reclamation facility, East Penn scientists invented the patented process that reclaims sulfuric acid from spent batteries for use in new energy storage devices. This zero discharge system recycles over 31.5 million gallons of water per year. The facility is the first of its kind in our industry, heavy metals and other impurities are removed and the solution is converted into sulfuric acid which is used in the manufacture of new products reducing the amount of virgin materials needed.

East Penn scientist invented the patented process that reclaims sulfuric acid from spent batteries for use in new energy storage devices. This zero discharge system recycles over 31.5 million gallons of water per year. The facility is the first of its kind in our industry, heavy metals and other impurities are removed and the solution is converted into sulfuric acid which is used in the manufacture of new products reducing the amount of virgin materials needed.

East Penn produces a liquid fertilizer solution from the sulfur fumes created during lead smelting. This solution is used to make fertilizer for agricultural use. Over 24,000 tons of this solution is sold to make fertilizer for agricultural use each year.

East Penn was also one of the first companies in the nation to install a scrubber unit to "scrub" gasses before they are released. These scrubbers eliminate sulfur dioxide emissions, which can cause acid rain.

Filtration units in use are 99.997 percent efficient at 0.3 microns. These systems produce air quality that is actually cleaner than that found in the surrounding atmosphere.

Throughout its facilities, East Penn employs the most advanced control technology available to reduce lead emissions. We began deployment of High-Efficiency Particulate Air (HEPA) filters in our manufacturing facilities more than a quarter century ago. Today, the state-of-the-art secondary HEPA filters are in use.

East Penn continuously monitors air quality from testing stations in the adjoining community and on-site monitors.

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A Closed Loop System of Sustainable Reuse
Reclaiming Resources

Acid
Plastic
Lead

plant. The reclaimed acid is used in new batteries. Used plastic is reclaimed and processed to be remolded into new cases and parts for new batteries. Recycled lead is alloyed to exact specifications to meet the needs of each battery or accessory line. Recycled lead is used in the production of all types of new energy storage devices. At the acid reclamation facility, East Penn scientists invented the patented process that reclaims sulfuric acid from spent batteries for use in new manufacturing facilities in cold weather. Sulfur fumes generated during the smelting process are captured and reprocessed into a liquid nitrogen sulfur solution. Over 24,000 tons of this solution is sold to make fertilizer for agricultural use each year.

East Penn produces a liquid fertilizer solution from the sulfur recovered and cleaned. This purified water is ideal for reuse and manufacture of glass products. In addition to using renewable energy sources to achieve zero discharge, East Penn has developed a process for removing heavy metals and other impurities from process wastewater. The process utilized in the wastewater treatment plant that is unique within the industry. An exclusive patented system of distillation, reverse osmosis, neutralization, co-precipitation, and salt crystallization produces water of exceptional purity, suitable for re-use in the production of our new products. It is fully compliant with Environmental Protection Agency and the Pennsylvania Department of Environmental Protection standards. Excess heat from our manufacturing facilities is redirected through a radiator system to warm adjacent buildings. Sulfur fumes generated from the furnace are captured in scrubbers and used in the recovery of sodium sulfate salt as a byproduct of the water treatment process. This zero discharge system recycles over 31.5 million gallons of water per year. The facility not only reclaims process wastewater, but also reduces groundwater use from on-site wells by as much as 100,000 gallons per day. Another East Penn innovation is the recovery of sodium sulfate salt as a byproduct of the water treatment process. This purified water is ideal for reuse in the production of glass products. East Penn treats and reuses wastewater from its manufacturing processes in an ultramodern wastewater distillation and purification plant. Thousands of gallons of wastewater are chemically treated each day.

Water is purified by reverse osmosis, removing any remaining solids. Pretreated wastewater is distilled, recovered and cleaned. This purified water is ideal for reuse in the production of glass products. East Penn treats and reuses wastewater from its manufacturing processes in an ultramodern wastewater distillation and purification plant. Thousands of gallons of wastewater are chemically treated each day.
A Closed Loop System of Sustainable Reuse

Acid

East Penn built the battery industry's first acid reclamation plant. The reclaimed acid is used in new batteries. East Penn scientists invented the patented process that reclaims sulfuric acid from spent batteries for use in new energy storage devices. At the acid reclamation facility, impurities are removed and the solution is converted into liquid nitrogen sulfur solution. Over 24,000 tons of this solution is sold to make fertilizer for agricultural use each year.

Plastic

Used plastic is reclaimed and processed to be remolded into cases and parts for new batteries. Recycled lead is alloyed to exact specifications to meet the needs of each battery or accessory line. New cases and covers are made from 100% recycled plastic materials.

Lead

Our highly efficient smelting facility provides lead required in the manufacturing of our new products. It is fully compliant with Environmental Protection standards. Excess heat from our manufacturing facilities more than a quarter century ago. Today, the state-of-the-art secondary HEPA filters in use are 99.997 percent efficient at 0.3 microns. These systems produce air quality that is actually cleaner than that found in the surrounding atmosphere.

Innovative Purification Processes

Pure Water, Pure Air

East Penn treats and reuses wastewater from its manufacturing processes in an ultramodern wastewater distillation and treatment plant that is unique within the industry. An exclusive patented system of distillation, reverse osmosis, and salt crystallization produces water of exceptional purity, suitable for re-use in the production of new energy storage devices. This zero discharge system recycles over 31.5 million gallons of water per year. East Penn continuously monitors air quality from testing stations in the adjoining community and on-site monitors.

Thousands of gallons of wastewater are chemically treated each day. Pretreated wastewater is distilled, recovered and cleaned. Water is purified by reverse osmosis before they are released. These scrubbers eliminate sulfur dioxide emissions, which can cause acid rain. East Penn continuously monitors air quality from testing stations in the adjoining community and on-site monitors.

East Penn was also one of the first companies in the nation to install a scrubber unit to "scrub" gasses fumes created during lead smelting. Filtration units in use are 99.997 percent efficient at 0.3 microns. These systems produce air quality that is actually cleaner than that found in the surrounding atmosphere.

Our lead-in-air levels are consistently below stringent federally regulated (NAAQS) standards.

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A Closed Loop System of Sustainable Reuse

Reclaiming Resources

Lead

Acid

Plastic

Battery plant. The reclaimed acid is used in new batteries. East Penn built the battery industry's first acid reclamation cases and parts for new batteries.

Used plastic is reclaimed and processed to be remolded into products reducing the amount of virgin materials needed. Recycled lead is used in the production of all types of new energy storage devices. This patented process that reclaims sulfuric acid from spent batteries for use in new battery industry is the first of its kind in our industry, heavy metals and other impurities are removed and the solution is converted into liquid nitrogen sulfur solution. Over 24,000 tons of this solution is sold to make fertilizer for agricultural use each year.

East Penn produces a liquid fertilizer solution from the sulfur that goes to the refinery where it's combined with reagents. Under tight computer controls, the lead is smelted and the fumes created during lead smelting are captured and reprocessed into a furnace is redirected through a radiator system to warm adjacent manufacturing facilities in cold weather. Sulfur fumes generated during the smelting process are captured and reprocessed into a liquid fertilizer solution. East Penn scientists invented the patented process that not only reclaims process wastewater, but also reduces groundwater use from on-site wells by as much as 100,000 gallons a year.

Thousands of gallons of wastewater are chemically treated each day. Pretreated wastewater is distilled, through a system of distillation, reverse osmosis, neutralization, co-precipitation, and salt crystallization produces water of exceptional purity, suitable for re-use in the production of new energy storage devices. This zero discharge system recycles over 31.5 million gallons of water per year. The facility meets Environmental Protection Agency and the Pennsylvania Department of Environmental Protection standards. Excess heat from our manufacturing processes is restrained and used for the manufacture of our new products. It is fully compliant with Environmental Protection standards. East Penn's lead recovery system is environmentally friendly and reduces waste and hazardous disposal.

Innovative Purification Processes

Pure Water, Pure Air

Wastewater treatment is actually cleaner than that found in the surrounding atmosphere. Filtration units in use are 99.997 percent efficient at 0.3 microns. These systems produce air quality that is small cleaner than that found in the surrounding atmosphere.

Emissions Control

Throughout its facilities, East Penn employs the most advanced control technology available to reduce lead emissions. The largest producer of high-quality batteries in the U.S, East Penn is reducing lead emissions to the point where it's below a quarter of a century ago. Today, the state of the art emission control system we use is currently the most efficient lead emission control system in the industry. East Penn was also one of the first companies in the nation to install a scrubber unit to "scrub" gasses before they are emitted. These scientific advances further reduce emissions, which can now and into the future be measured by the smallest "scrub" gasses before they are emitted. These scientific advances further reduce emissions, which can now and into the future be measured by the smallest
Our Environmental Protection Plan

Our Environmental Accomplishments

Lead Smelting
Our EPA- and Pennsylvania Department of Environmental Protection-permitted smelter recycles over 200 million pounds of lead per year.

Acid Reclamation
East Penn’s acid reclamation plant was the first in the industry. This patented process recycles millions of gallons of acid per year, diverting this material from potentially hazardous disposal.

Plastic Recycling
Plastic battery cases and covers are cleaned, ground, and converted into pellets for use in the manufacturing of new battery parts. East Penn recycles over 11 million pounds of plastic per year.

Environmental, Health & Safety Certifications, Awards, and Recognitions

- Entire 520-acre complex certified to ISO 14001:2015 environmental requirements
- Pennsylvania Governor’s Award for Outstanding Environmental Excellence
- American Society for Quality (ASQ) Total Quality Award
- Environmental Leadership Award, Pennsylvania Institute for Energy Environmental Health
- Environmental Stewardship Award, Pennsylvania Institute for Children’s Environmental Health
- Healthcare Heroes – 2014 Corporate Achievement Award by Lehigh Valley Business
- Pennsylvania Water Environment Association – 2014 Industrial Waste Excellence Award

Who We Are
Since day one, East Penn has made safe recycling an everyday practice. East Penn opened its doors as a battery rebuilding company almost three quarters of a century ago. Today, the company has never stopped building on its expertise, infrastructure, capabilities, and commitment. This continuous commitment has made us the most progressive manufacturer in environmental protection and technologically advanced battery recycler throughout the entire industry. It also continues to give our customers the critical reassurance of safe battery recycling without the worries of debilitating fines, penalties, or paperwork associated with hazardous waste disposal laws.

What We’ve Done
The centerpiece of East Penn’s commitment to the environment can be found in our product stewardship principles that include a continuous product life cycle approach. At our state-of-the-art recycling facility, we process approximately 2,500 batteries per hour that are computer-controlled, closed-loop systems, a process that has our manufacturing facility recycled virtually 100 percent of each spent battery we process, each of the three major battery components (lead, plastic, and acid) are safely recycled and used in making new energy storage devices.

Where We’re Going
East Penn continues to lead the industry through innovative recycling, environmental protection, and proactive continuous improvement. The company is also helping to make “greener” batteries with new advancements in advanced battery technology. Two products produce essential aid in hybrid vehicles. Recyclable Energy Integration, Smart Grid Services, and other power solutions are highly energy-efficient, conserve energy, and reduce CO2 emissions.

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WHAT WE’VE DONE
The centerpiece of East Penn’s commitment to the environment can be found in our product stewardship principles that include a continuous product life cycle approach. At our state-of-the-art recycling facility, we process approximately 30,000 batteries per day. Our computer-controlled, closed-loop system, co-located with our manufacturing facility, recycles virtually 100% of each spent battery received for processing. Each of the three major battery components (lead, plastic, and acid) are safely recycled and used in making new energy storage devices.

WHERE WE’RE GOING
East Penn continues to lead the industry through innovative recycling, environmental protection, and proactive continuous improvement. The company is also helping to make “green” consumer waste management programs even more environmentally friendly. By continuously advancing energy storage technology, our products are not only safer and cleaner, but also provide a powerful voice for protecting our planet’s precious resources.

Environmental, Health & Safety Certifications, Awards, and Recognitions

- 520-acre complex certified to ISO 14001:2015 environmental requirements
- Pennsylvania Governor’s Award for Outstanding Environmental Performance
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