

ENVIRONMENTAL PROGRAM OVERVIEW



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INTRODUCTION

Colorado Industrial Recycling considers environmental accountability to be a core company value. We understand that we cannot be healthy as a business if we allow our operations to make the community unhealthy. We recognize that we have an obligation to keep the public safe and to diminish the negative impacts our operations have on our local environment. Our commitment to public health and the environment is fundamental to our desire to be a business that operates with integrity. This connection between environmental accountability and our success as a business is especially important given the industry in which we operate. As a recycling company, we are uniquely connected to the culture of environmental sustainability. The services we provide through our business are part of the solution to building a more sustainable economy. Therefore, the more the community values sustainability, the more our business stands to benefit. Consequently, it is in our interest to broaden our perspective beyond just our operations and look for ways to advance environmental sustainability as a cultural value within our society.

Although it seems logical for a recycling company to promote environmental sustainability as a core value, the recycling industry, especially the scrap recycling industry, does not have a stellar reputation when it comes to environmental performance. Over the years, several recycling operations have been cited for violating environmental regulations. A number of these violations were serious enough to garner public attention. With some justification, this has resulted in the industry receiving a poor reputation when it comes to environmental accountability. As a result, Colorado Industrial Recycling has had to work hard to overcome the negative stereotypes about scrap recycling and demonstrate that we take our environmental obligations seriously. We have done this by making a commitment to transparency and by adopting a culture that promotes continual improvement in environmental performance. Our efforts in this regard have been recognized by state regulators, customers, and others in our industry. As a result, we have acquired a reputation as an industry leader when it comes to environmental performance.

COLORADO GREEN BUSINESS NETWORK (CGBN) – GOLD MEMBER



The State of Colorado developed the Colorado Green Business Network (CGBN) as a way of encouraging and recognizing environmental best practices. The program is administered by the Colorado Department of Public Health and Environment (CDPHE). The CGBN has three levels of membership (bronze, silver, and gold) to distinguish members based upon levels of achievement. We have achieved gold status in the program. Prior to admitting a company into the program, the CDPHE performs a comprehensive audit of the business. At the gold level, a business must possess a clean regulatory history (going back three years), demonstrate best management practices, and be active in promoting sustainability in the community. We were the first business in the Pikes Peak area to achieve gold status in the CGBN. We were also the first recycler in the entire state to achieve the distinction. Our gold level status must be

recertified every three years. We have successfully recertified each three-year-term and have maintained our gold status without interruption.

ENVIRONMENTAL POLICY

Our company is committed to environmental leadership in all aspects of our business practices. We implement, adhere to, and review policies that protect the public, our employees, as well as the environment. We believe these policies will create a safe working environment, as well as conserve energy and natural resources.

As a company, we collectively pledge to:

- Provide a safe workplace by ensuring that all personnel are properly trained with the appropriate safety and emergency equipment.
- Ensure the responsible use of energy throughout our business, including conserving energy, improving energy efficiency, and giving preference to renewable over non-renewable energy sources when feasible.
- Use pollution prevention to reduce or eliminate the toxicity and the amount of toxic substances and/or hazardous wastes, minimize their undesirable effects on natural resources (including air, water, and soil), and to conserve our natural resources.
- Meet and exceed all applicable Federal and State requirements in place for the metal recycling industry.
- Strive to continually improve our Environmental Management System (EMS) through active participation in the EMS by employees and management staff, as well as periodically reviewing and analyzing EMS procedures and policies.
- Promptly report all noncompliance issues in accordance with applicable governmental reporting requirements, evaluate causes of noncompliance, and implement corrective actions.
- Continuously seek opportunities to improve the effectiveness of our environmental program

ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)

An environmental management system (EMS) is an operating model that seeks to ensure environmental impacts are given consideration when making decisions on behalf of a company. An EMS requires that a business seek to understand its environmental impacts. This must be done in an honest and transparent manner. The business must then work systematically to

improve its environmental performance. There are no regulatory obligations that force a business to adopt an EMS. Consequently, an EMS is enacted solely by businesses that see environmental accountability as a core value and voluntarily seek to tie company goals and objectives to environment performance. An EMS is structured around a **PLAN, DO, CHECK, ACT** model. This model involves the following:

- **PLAN:**
 - Conduct a thorough inventory of environmental impacts and aspects
 - Identify which impacts are significant
 - Establish goals and objectives that relate to improving performance around significant impacts
- **DO:**
 - Establish roles and responsibilities
 - Develop action steps and timetables
- **CHECK:**
 - Measure performance related to goals and objectives
 - Review outcomes with management
- **ACT:**
 - Implement corrective action



An environmental management system is not something you ever finish. Upon completion of the **PLAN, DO, CHECK, ACT** cycle, a new cycle will begin. In the case Colorado Industrial Recycling, our EMS is currently on a three-year cycle. In this way, companies with an EMS in place look to continually build upon improvements in performance and seek continual improvement.

ROLES AND RESPONSIBILITIES

- **Ownership and the Director of Operations:** are responsible for establishing the company vision as it relates to environmental management. They will also ensure that the EMS is implemented effectively. This requires the allocation of resources towards the development and achievement of the objectives established through the EMS. Ownership must also assign roles and responsibilities for the EMS and provide supervision of all the personnel responsible for its implementation.
- **EHS Manager** : is responsible for coordinating all the activities related to the EMS, including updates to the aspect and impact analysis, schedules for internal audits and management reviews, and the development of new objectives. The EHS Manager will also maintain records related to the system, including revising policy documents and tracking any data related to EHS objectives. In addition, the EHS Manager is responsible

for ensuring CIR understands its regulatory requirements and remains in conformance with those mandates.

- **EHS Yard Liaison:** will participate in all internal audits and help ensure follow through on any required corrective action produced through those audits.
- **Management Staff:** are responsible for providing input concerning environmental aspects and impacts, issues related to regulatory compliance, the root cause of nonconformities, the establishment of corrective action, and the development and implementation of EMS objectives. Managers will also keep their respective teams informed about pertinent EMS related information.
- **Employees:** are responsible for complying with regulatory requirements and internal standard operating procedures within the course of performing their primary duties. Employees must comply with audits and help implement corrective action when nonconformities are identified. Employees are also to provide feedback and input when it comes to the development of EMS goals and the overall effectiveness of the system.

ENVIRONMENTAL IMPACTS

As part of our environmental program, we conduct a comprehensive aspect and impact analysis to help us better understand how our operations could impact the environment. This analysis considers the significance of the impact to the health of humans and wildlife, the likelihood of occurrence, our legal obligations, and the degree to which we can control or influence the impact. By understanding the environmental risks associated with our operations, we are better positioned to take steps to either eliminate or reduce their impacts. Our analysis has determined that our most significant environmental impacts are as follows:

SOIL AND WATER CONTAMINATION

The release of potentially hazardous waste into the soil and water table is the most significant potential impact our operation could have on our environment. Such contamination could result from improper disposal of hazardous materials, a discharge of contaminated stormwater, or potentially an accident of some sort that results in a spill of automotive fluids. The consequence of one of these events could be significant. Soil and water contamination can devastate ecosystems and ultimately endanger public health through the contamination of drinking water.

- **Improper Disposal of Hazardous Waste:** Although we do not recycle hazardous waste, the potential always exists for us to unwittingly receive hazardous materials from our customers. Beyond the material we collect, our operations also generate some potentially hazardous materials. Through the processing of cars for recycling and the

maintenance activities performed by our mechanics and welders, we produce a variety of automotive fluids, gases, and cleaning supplies that could produce harm if released into the environment.

- **Stormwater Pollution:** Stormwater pollution is when rainwater or snowmelt is contaminated as it flows into a local waterway. It occurs when precipitation carries heavy metals, chemicals, bacteria, oils, dirt, or trash away from a fixed site and into the runoff water headed to the waterway. As a scrap yard, we handle, process, and stage thousands of pounds of metal on site at any given time. The fines from the various metals stored in our yard could contaminate the water supply if they were released into the environment. As referenced above, there are also automotive fluids and cleaning supplies that are kept onsite. Even with proper disposal of these materials, there is still the potential for contamination to occur from an unintentional release into the environment through stormwater. The consequences of stormwater pollution would be particularly severe for Colorado Industrial Recycling given the proximity of our yard to Sand Creek, a major waterway in our community.
- **Spills:** We operate several commercial vehicles that perform commercial hauls and transport material to downstream processors. The possibility exists for one of these vehicles to malfunction or sustain damage that causes it to spill automotive fluids in the community. Depending upon the location of the spill, this could result in environmental contamination.

AIR POLLUTION

Beyond the management of toxic materials, our operation is also responsible for a variety of forms of air pollution.

- **Electricity:** The electricity used to power our lights, kitchen and IT equipment, and the various equipment throughout our yard (e.g. our baler, shearers, grinders, etc.) is generated from Colorado Springs Utilities. Colorado Springs Utilities currently gets 61% of its energy through the burning of natural gas. The burning of natural gas generates greenhouse gas emissions that contribute to global warming.
- **Heating:** We utilize natural gas through Colorado Springs Utilities to heat our office buildings and propane to heat many of our other structures. The burning of these gases emits carbon into the atmosphere, contributing to global warming.
- **Gasoline Powered Vehicles:** We operate a variety of trucks, cars, and heavy mobile equipment that are gasoline powered (both diesel and unleaded). The emissions from these vehicles contributes to global warming.

- **Super Chopper and Wire Processing Plant:** Through the chopping and granulation of various types of cable and wire, we emit particles of plastic, dust, and metals.
- **Refrigerant Recovery:** Part of our obligations when processing scrap vehicles is to evacuate the refrigerants from the vehicle air conditioning systems. Depending upon the age of the vehicle, the air conditioning unit will contain either chlorofluorocarbons (CFCs) or hydrochlorofluorocarbons (HCFCs). The improper release of CFCs damages the ozone layer, while the improper release of HCFCs produces a significant greenhouse effect.
- **Welding:** Welding involves the burning of oxygen, acetylene, and other gases. The emissions from welding can contaminate air and soil, potentially causing harm to local ecosystems.

SOLID WASTE

As a recycler, we seek to recycle as much material as we can. That said, there are some materials generated through our operations that cannot be recycled. Although our level of waste is much less than most businesses, we do still generate solid waste. This solid waste is landfilled leading to a loss of natural resources.

ENVIRONMENTAL CONTROLS

As we have seen, there are many ways our operations could negatively impact the environment. As a company that cares about environmental sustainability, we have enacted several measures that either reduce the likelihood that environmental impacts may occur, or, when that is not possible, at least limit their severity. In many cases, we have taken a multi-level approach to mitigate environmental impacts. These controls fall into one of two categories:

- **Engineered Controls:** Where appropriate, we have implemented structural modifications to our yard and equipment to prevent unintended contamination or pollution.
- **Best Management Practices (BMPs):** We have developed a comprehensive program of documented procedures, training, and internal audits that are explicitly aimed at reducing the risk of negative environmental impacts.

WASTE MANAGEMENT POLICY

Colorado Industrial Recycling does not take any materials that are classified strictly as hazardous waste. We also do not take any items that have costs associated with proper

disposal. Likewise, we do not accept material that may have been stolen. Broadly speaking, this policy excludes us from taking any of the following:

- **Hazardous Wastes:**
 - Liquids
 - Gas cylinders/tanks (that have not been de-valved)
 - Mercury containing devices (including light bulbs)
 - Paint
 - Televisions and monitors.
 - Most types of batteries (we only take lead acid batteries)
 - Ballasts or transformers that contain polychlorinated biphenyl (PCBs)
 - Radiation emitting material
 - Appliances with refrigerants (unless we can verify how the refrigerant was extracted)
- **Material with Cost:**
 - Trash (except for contracted commercial accounts)
 - Plastics (except for contracted commercial accounts)
 - Glass
 - Wood (except for contracted commercial accounts)
 - Concrete (except for contracted commercial accounts)
 - Tires (unless on aluminum or as part of a scraped vehicle)
 - Dirt (under any circumstances)
 - Tar (under any circumstances)
- **Material that Might Be Stolen:**
 - Cars without titles or vin numbers
 - Material with asset tags from the railroad or a governmental agency (unless coming from the source)
 - Shopping carts (without memorandum from the source).
 - Beer kegs (without memorandum from the source)

We attempt to prevent customers sending us unauthorized material by providing them with information about our material acceptance policy and by having them sign service agreements. That said, we cannot assume the customers will comply with our policy. Our procedures are designed to ensure that all material is inspected upon receipt and any material in violation of our material acceptance policy is rejected. If unauthorized materials arrive through one of our roll-off containers, we take pictures of the rejected material and contact the customer/generator to inform them of the violation. If we have an ethical avenue to recycle or dispose of the material, we will offer the customer the option of having us charge a service fee to manage the material on their behalf. Otherwise, we will arrange to return the material back to the customer's site.

We review our material acceptance policy extensively during our onboarding training of new hires to ensure all our staff can properly identify and reject unauthorized materials. However, as indicated above, we do generate some potentially hazardous materials through our operations. We take our responsibility managing these hazardous materials very seriously. Spent/retired automotive fluids, refrigerant gases, and other hazardous wastes are managed exclusively through qualified vendors that have the competency and capacity to safely recycle or dispose of these materials. Colorado Industrial Recycling strictly forbids the disposal of these hazardous materials through our standard solid waste stream. These problematic materials are segregated from other wastes and properly identified and stored until one of our qualified vendors can transport the material offsite.

Although it does not impact environmental contamination, it is important to note that our waste management policy also looks to diminish non-hazardous waste within our facility. We look to recycle as much material as possible. While this effort to recycle includes diverting commonly recycled items like paper, cardboard, and aluminum cans, we have taken this effort to recycle a step further. We have designed our automotive processing to try and recycle as many of the automotive fluids we extract from scrap vehicles as possible.

STORMWATER MANAGEMENT PLAN (SWMP)

While directing hazardous waste towards proper disposal is relatively straightforward, proper environmental management requires much more than just waste management. To prevent soil and water contamination we must also proactively work to mitigate against the risk of an unintentional release. For us, this means implementing controls for the prevention of stormwater pollution. In recognition of this potential risk, the Clean Water Act (CWA) and the National Pollutant Discharge Elimination System (NPDES) Permit were developed to regulate how businesses should proactively manage stormwater outfalls. In compliance with these regulations, we have applied for and received a permit through the CDPHE. Our permit requires that we develop a site-specific Stormwater Management Plan (SWMP). As with other aspects of our environmental program, the SWMP is centered around a combination of engineered controls and best management practices. The core aspects of our SWMP are as follows:

- **Proper Containment of Hazardous Materials:** Colorado Industrial Recycling is committed to ensuring all hazardous materials generated through our operations are properly identified and stored in enclosed barrels or tanks.
- **Containment of Stormwater:** We have designed our yard to reduce the likelihood that stormwater will discharge offsite. Several engineered controls have been implemented for this purpose. They are as follows:
 - **Concrete Surfaces:** All the areas of our yard that are used for processing material, welding, or maintenance activities have been concreted. This layer of

concrete is designed to prevent automotive fluids and metal fines from leaching into the soil and the water table.

- **The Pit:** Our Pit is completely lined and can act as a point of collection for stormwater. For this reason, we use water pumps during storm events to direct water toward the Pit. The Pit could potentially hold up to 50,000 gallons of water.
- **Retention Pond:** We have constructed a stormwater retention pond by our automotive processing area. The pond has the capacity to retain up to 80,000 lbs. of water.
- **Stormwater Retention Tanks:** In the southwest corner of our yard, we have installed sand traps that lead to three 10,000-gallon underground tanks. These tanks are located at the lowest elevation point in the south section of our yard. In this way, gravity directs runoff toward these tanks.
- **Swale System:** We have also engineered a swale system just to the northwest of the 2720 office building. The swale system is designed to slow down the flow of runoff and allow metal fines and other suspended solids to be absorbed into catchments areas before the water can flow out of the facility.

Our yard is designed to direct most of the precipitation that falls onsite towards one of these engineered controls. The captured stormwater in our retention pond and underground tanks is directed to a company that recycles this water through a water treatment plant.

- **Monitoring of Discharges:** Should there be precipitation beyond the capacity of our containment, that runoff water will eventually go towards one of two different outfall points. If this water does reach the outfalls, we are obligated to sample it on at least a quarterly basis to ensure there are no pollutants contaminating that water. The water samples are sent to a lab for analysis and the results of those tests are reported to the State.
- **Housekeeping:** Perhaps the most vital aspect of our stormwater management plan is our housekeeping and organizational standards. Housekeeping is emphasized in every department of our operations. We expect every employee to clean their work area as they go. Cleaning up spills, putting things in proper containers, and sweeping up dirt and metal debris are important best management practices as we try to keep contaminants out of our stormwater.
- **Organization:** It is also critical that we keep things well organized. We have designed the layout of our yard to ensure that every material we collect and all the equipment we use has a designated spot where it belongs. Stormwater is always a major consideration as we plan the layout of our yard. Whenever possible we locate activities likely to generate contaminants as far away from our outfall locations as possible. We are also strategic in where we stage material. Materials with acute risk for stormwater contamination are kept under cover. When material has to be staged outdoors, we

locate bays in areas far removed from outfall locations. In this way, there is a lot of consideration to how we design our operations. However, organization has value beyond just where we locate activities. Maintaining an organized facility also makes it easier to identify when something is out of compliance with our environmental policies. This allows us to respond quickly to these oversights and correct them before an environmental incident occurs.

- **Inspections and Audits:** Before leaving for the day, each section of our yard is responsible for inspecting the area to ensure consumables are properly contained, the area is swept of debris, and material that requires cover is put away. We cannot ever leave the facility without making sure we take these minimal measures. In addition to these daily inspections, we also perform a comprehensive monthly stormwater facility inspection. This inspection involves evaluating all engineered controls and best management practices to ensure they are fully implemented and effective. Our goal with these audits is to quickly identify when there is something out of compliance, so we can ensure it is quickly corrected.
- **Training:** Colorado Industrial Recycling reviews the primary aspects of our SWMP during initial employee orientation, throughout our onboarding training, periodically during departmental meetings, and through a mandatory annual training session provided by our environmental consulting firm.

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN

Part and parcel to our Stormwater Management Plan is our Spill Prevention Control and Countermeasure (SPCC) Plan. The SPCC plan outlines our procedures for identification, storage, and spill response for the hazardous materials we have onsite. Those procedures can be summarized as follows:

- **Proper Containment:** All hazardous material needs to be stored in containers that protect against spillage. Containers should be filled no more than three inches from the top. The containers must have sealable lids and sit in secondary containment. The secondary container must have a surface area at least 15% larger than the primary container and be nonporous. Within our operations, we will generally use either above ground storage tanks (ASTs) sitting in a protective outer shell or 55 gallon drums with sealable lids sitting in a plastic tote or spill-proof pallet. **There should never be a barrel or other container with hazardous materials that is sitting directly on the concrete.**
- **Labelling:** All hazardous materials must be identified through labeling. The labels should clearly identify the contents and provide insight into the hazard. If empty drums or containers are being stored onsite, they should be labeled as “empty” to help avoid confusion. **If a barrel with contents does not have an identifying label, contact a supervisor to make sure it is properly labeled.** The labelling requirement applies to all liquids as well. **Even bottles of water must be identified!**

- **Spill Response:** With auto processing and the various maintenance activities we perform, spills of automotive fluids are a routine occurrence. Dozens of spills may occur throughout the day. Consequently, it is critical that we are very responsive in cleaning up these spills when they do happen. Employees must immediately stop work activities to address spills. **Cleanup cannot wait until the end of the day; we must clean spills as we go to maintain a clean yard.** If the spill is a gallon or less, it is simply on each employee to see to the spill. For most common spills, staff will need to put down an absorbent over the entire area of the spill. We typically will use mulch. Once the spill is covered by the absorbent, the employee can return to the task he or she was working on. After the spill is fully absorbed the absorbent will need to be swept up and disposed of in the Pit (where there is proper containment). If a spill larger than a gallon occurs, contact a manager to determine how best to clean the area.

VEHICLE MAINTENANCE AND FUEL CONSERVATION

We possess a rather large fleet of gasoline (diesel or unleaded) powered heavy trucks, light-duty vehicles, and heavy mobile equipment. These vehicles are used extensively, and the emissions they produce produces a carbon footprint. Beyond that, vehicles and equipment may also experience a leak or a busted line that could cause a spill of automotive fluids. This could result in soil or water contamination. Although we cannot eliminate the environmental impacts of our fleet of vehicles and equipment, we do take several steps to help mitigate those impacts. These mitigation efforts include the following:

- **Pre-Shift Inspections:** One of the most significant ways that we can diminish the negative environmental impacts associated with vehicle and equipment operation is to ensure our vehicles and equipment are operating properly. No vehicle or piece of equipment is put into operation without first being thoroughly inspected. Prior to qualification as a driver or operator, employees must undergo training regarding how to conduct these pre-trip/pre-shift inspections.
- **Vehicle and Equipment Maintenance:** Proper maintenance can greatly improve fuel efficiency and significantly diminish the likelihood of leaks or busted lines. Colorado Industrial Recycling has a full-service maintenance department to ensure we implement proper preventative maintenance and to repair damaged equipment. Every piece of equipment is on an aggressive maintenance schedule that is tracked and followed closely. In most cases, oil changes, filter changes, and part replacements are done at frequencies that are far more conservative than what is recommended by the manufacturer. Having a team of maintenance technicians onsite also allows us to promptly respond to service repair issues. Finally, we have ensured that we have a spare truck for each type of vehicle we utilize. Having a spare available makes it very easy for us to put a vehicle out of service should there be any question as to its fitness for operation.

- **Efficiency in Operation:** Beyond our maintenance program, we have also sought to establish procedures for operation that will promote efficiency. All of our CDL vehicles have regulators in place to limit top speed. This ensures that cruising speed on highways and interstates remains at an optimal level for fuel efficiency. Fuel efficiency is also prioritized when it comes to how we route our jobs. When routing our hauls, our drivers and dispatch are encouraged to be as efficient as possible. For each scheduled haul, we look for the most efficient ways of fulfilling the job as possible (e.g. bringing an empty container to swap out with the full container to eliminate an extra trip to the customer site). We also have installed a fueling station at our yard to ensure drivers do not have seek out gas stations. This too significantly improves efficiency.
- **Spill Response:** All of our drivers are trained in how to respond to spill in the community. If a vehicle experiences a busted line or an accident leads to a ruptured tank, we have procedures in place to ensure the spill is properly contained.

REFRIGERANT RECOVERY

We have established procedures to recover and recycle chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs). We inspect all vehicles for motor vehicle air conditioners that still contain refrigerants. If an unauthorized appliance arrives in a roll-off container, our staff also know how to check it for refrigerants. We have two refrigerant evacuators onsite to safely recover the refrigerants from these units. The evacuated refrigerants from these units are then recycled through a downstream processor. We track the recovery process and keep records of this process for mass balance accounting. If a customer brings us an appliance with refrigerant already extracted, we have the customer verify that the recovery was properly recovered prior to its arrival.

WIRE PROCESSING ENGINEERED CONTROLS

Our wire processing operation involves chopping, granulating, and separating the various components of wire and cable (i.e. steel, aluminum, copper, and insulation and jacketing). As the material is chopped and granulated there is a release of particulates of dust, plastic, paper, and metal that is released into the atmosphere. If uncontrolled, this could lead to air pollution. To address this potential impact, our plant was designed with a series of engineered controls designed to prevent air pollution. The machine has a system in place that vacuums the particulates released through the granulation process and filters that air through a baghouse system. The plastic, dust, and other waste materials are then deposited through an enclosed shoot system into an enclosed roll-off container. We have conducted air quality tests in our wire processing plant during operation to test the effectiveness of this baghouse system. The results from these air quality tests have indicated pollutant levels far below the regulatory thresholds requiring air permitting. Colorado Industrial Recycling has filed an Air Pollutant Emissions Notice (APEN) with the CDPHE and will continue to monitor pollutants from the machine to ensure the environmental impact remains small.