

Orphaned Cylinders Piling Up in Your Yard? 5 Reasons Why You Shouldn't Wait.



Compressed Gas Cylinders are used extensively for manufacturing, industrial, and consumer applications.

Companies need a comprehensive, closed-loop process for handling CG cylinders once the contents have been consumed (either partially used or wholly). Businesses often use several gas cylinders at a time before sending them back to be refilled by the supplier, meaning they must store the extra tanks somewhere until they are ready to be used.



In our over ten years of experience processing over 300,000 cylinders, we've seen a consistent pattern: our clients encountered difficulties by waiting longer than necessary to hire a professional to handle their orphaned cylinders. Delaying cylinder management has led to employee uncertainty and doubt, as your onsite personnel will have questions like:

- Can this cylinder be stored in the vertical or horizontal position?
- Is this cylinder truly empty?
- Can I store these cylinders inside our building? Can I move them within the yard without approval?
- Does this cylinder contain corrosive, toxic, or flammable material?

Don't make your employees uncomfortable, worried about their safety or what to say when OSHA drops in for a surprise audit.

Here are the Top 5 themes we've noticed for our customers that have orphaned cylinders in their scrap yards:

1) Hazardous Material Risks: Our clients have other business priorities and underestimate or don't understand the hazardous materials risks. For companies that don't deal with CG every day as we do, it's difficult to know how to handle corrosive vs. toxic vs. flammable, etc. So many variables are at play – a professional service provider must evaluate the orphaned cylinder status, create a path forward, and execute that plan safely and promptly.

Here are the most common types of gas cylinders:

- Corrosive: Ammonia, Hydrogen Chloride, Nitrogen Dioxide, Sulfur Dioxide
- Toxic: Carbon Dioxide, Nitrogen, Butane, Propane, Noble Gases
- Flammable: Hydrogen, Acetylene, Ammonia, Methane
- Cryogenic: Argon, Oxygen, Helium, Propylene
- Inert: Noble Gases
- Oxidizer: Chlorine, Nitrous Oxide, Compressed Air

There is no “one size fits all” for handling these varying material types – it takes a trained professional. There may be a temptation to “DIY” cylinder removal. However, improper disposal of cylinder contents can be very dangerous. [A certified and trained team](#) knows how to handle the situation and properly dispose of hazardous contents, minimizing the impact on Mother Nature.



2) Liability Risks: Beyond the environment, safety and liability risks should be considered. As an employer, you are a de facto steward of the well-being of your employees. In the ever-changing world of safety and health regulation, without proper training, an orphaned gas cylinder could lead to unexpected:

- Explosion,
- Fire, or
- Poisoning.

This risk could impact employees’ health, retention, or surrounding businesses or housing areas. You don’t have the time or money to keep all potential touchpoints trained and certified in handling these potential risks.





Did You Know: A single gas cylinder compressed at 2,000 PSI has as much energy as 1.5 pounds of TNT! If the cylinder is ever punctured, it can act as a missile and physically injure someone due to the pressure inside.

3) Transportation Risks: What kinds of cylinders are piling up in your warehouse or storage yard?

Many of these jettisoned containers probably can no longer be identified. Their labels may have been removed or are illegible. You can't understand how they should be handled since you don't know what's in them. Federal law prohibits transporting compressed gas cylinders that are no longer certified or whose contents are unknown unless they are treated as hazardous materials.

Disposal is a big concern. These mystery cylinders create a safety hazard and pose a significant liability.

Propane cylinders may contain hydrochloric acid or ammonium hydroxide after being discarded by someone using them for cooking up crystal meth. Acetylene cylinders may have asbestos and acetone residue. What are you going to do with these risky cylinders?

There might be a thought internally at your company: "Let's handle these orphaned gas cylinders once-and-for-all. Assign this action item to the shipping & receiving department; let's just move them to a 3rd party handler and be done with it."

Not so fast! Transportation is not recommended due to the following risks:

- Risk moving the cylinder from your storage area to the vehicle,
- Choosing the correct vehicle per DoT (Department of Transportation) standards,
- Securing cylinders in the vehicle to ensure that in rough roads or an accident, no cylinders are ever out of control, and,
- Actual transport via vehicle.



It's important to realize that even an "empty" compressed gas cylinder is not genuinely empty unless the valve is removed and a whole has been drilled through the cylinder wall.. A cylinder is **certified** empty when the gas in the tank drops to the atmospheric pressure outside the tank. The gas will no longer come out of the valve but potentially leak out of the tank if cracked or punctured.

Click here to find out more about DOT Regulations Related to Transporting Cylinders

There's an easier way. Stop trying to figure out all these transportation risks and instead hire an on-site handling company. All cylinders will be handled on your company grounds, safely distant from your staff and surrounding areas.

4) Training and Tooling Gaps: Our clients thoughts echo ours:

Only fully trained and certified professionals should handle compressed gas cylinders.

Let us worry about the regulations and take this burden off your shoulders. Avoid trying to keep up with all requirements associated with cylinder transport. Don't worry about training logs and KPIs – hire a professional that handles cylinders on-site.

Time is money: Don't wait weeks to finish this – it's been on your to-do list for far too long. Hiring a professional means that once scheduled, this task can be done in days, not weeks or months.

5) Financial Risks: Just like the time value of money, your decision to delay this critical task can lead to unplanned financial risk, which can include:

➤ Possible OSHA penalties

OSHA has teams that ensure industrial manufacturers do everything possible to protect occupational safety and health. Don't let your company be made an example!

➤ Potential EPA fines

Like OSHA, the EPA is government-mandated enforcement to keep the environment healthy. Orphaned cylinders that have been mishandled can lead to fines.

➤ Potential misdemeanor charges

Some scrap dealers have faced penalties of one year in jail and **up to \$100,000 in fines**. Disposing of compressed gas cylinders is a big problem and can be a significant expense.

These are just the Top 5 reasons to outsource your company's handling of spent CG cylinders...

There are other items to consider.

Choosing the right partner can lead to money back in your pocket. Your company benefits financially, and company risks are decreased. In addition, the right team can handle these potential headaches more efficiently than in-house resources. This can lead directly to money back in your pocket – a “win-win.” Your company benefits financially, and the P&L statement is improved when you remove liability from your yard.

**Call or email today
so we can help you Take the Pressure Off**

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