



OUT WITH THE OLD...

The R-22 Phase Out and What it Means for You

2020 brought a lot of changes to life, but one that may have been missed in the general mayhem was the final discontinuation of the R-22 refrigerant, commonly referred to as freon (formerly an industry standard). As of January 1, 2020, in accordance with the EPA directive, the production and import of this substance—which is the fluid that flows through the coils to cool your home—was banned.

This change was a long time coming. R-22, a hydrochlorofluorocarbon, was identified in the 1980s as being detrimental to the earth's ozone layer, and in January of 2010 a long-range plan was implemented to phase it out and eliminate its use in the US. It is probably not part of the typical dinnertime conversation for the average homeowner, so one might be entirely surprised during a service visit to learn about these developments. Here are some things you should know about the phase out:

How do I know what type of coolant is used in my home?

This information can often be found on the manufacturer's plate on your outside condensing unit. If you have trouble finding it, your service professional can be of assistance.

Can I continue to use my current air conditioning unit if it uses R-22?

Yes, you can continue to use the unit and the coolant within it, despite the ban. However, since the fluid is no longer manufactured, it is available only through aftermarket use and harvesting from older units. This scarcity drives up the cost of the fluid to a point where adding more may be prohibitively expensive.

Should I be aware of any special circumstances when repairing and maintaining my existing unit?

If you have an older unit that uses R-22 it is even more important to engage in regular maintenance. This is helpful for both the environment and your pocketbook. Identifying leaks and repairing them promptly will ensure the precious fluid will not be lost. Additionally, actively pursuing the underlying issues for low fluid levels rather than just topping them off is preferred.

Can I just replace my old refrigerant with the new version?

Sadly, no. The chemical qualities of the replacement fluid is different enough that a simple switch cannot be made.

Should I consider replacing my air conditioner?

Depending on the age and the efficiency of your current unit it may make sense to consider upgrading to a new unit rather than face increasingly costly repairs. Chances are good that a new air conditioner will offer you a good return on your investment with increased efficiency and savings on utility bills.

If you have additional questions about R-22 and how it affects your cooling system, feel free to give us a call. We will be happy to assess your situation and offer our recommendations for what makes the most sense for your home and budget.

Sneaky Indoor Pollutants

Your home is a haven, a place where you can go to rest, relax, and recoup. A place where you can breathe easily. But the air you breathe at home may be riddled with particles that can wreak havoc on your respiratory system and exacerbate other health issues, both long term and short term. In fact, studies by the EPA point out that the concentration of indoor air pollutants is often several times higher than those outdoors.

Although indoor air pollutants can come from many sources, there are a handful of products and practices that you may not readily think of which cause an uptick in airborne particles in your home. The good news is, once you know what they are you can easily modify your use and ditch the bad effects.

Cleaning Products

Should you quit cleaning for cleaner air? Well, not exactly. But the reality is that those cleaning products you spray, swipe, and spread across your surfaces can have a detrimental effect on the quality of your air. Ammonia, bleach, and even citrus oils can be toxic if inhaled or touched and cause irritation. To reduce the unintended consequences of cleaning, look for

products which are more natural or “green” in nature, or search out products with the EPA Safer Choice label. You can also use good, old-fashioned ingredients such as vinegar and baking soda to do the job without adding to air quality problems within your home.

Aerosol Products:

We have been hearing about the dangers of aerosol products for years now, and it makes sense to do a quick trip around the home to see which of those you can eliminate from use. Products on your bathroom sink are often the biggest culprits (hairspray, we’re looking at you); but the kitchen may have a few as well, such as oil sprays and the like. Opting for non-aerosol versions of your favorite products will help your air quality immensely.

Paint Cans

It’s easy to finish up a painting project and save the remainder for future touch ups. But what you may not realize is leftover paint continues to give off VOC (volatile organic compounds) into the air—even from sealed containers. Look for low VOC paint formulas, dispose of the can when finished and, if you do store leftovers, keep them in a well-ventilated area of your home.

Dry Cleaning

Those clothes may look pristine and pressed, but the dry cleaning process often uses a chemical called perchloroethylene which continues to release into your home’s air and can be a danger to humans and pets. If machine washing or hand washing isn’t an option, allow clothes to hang in the garage for several days before bringing them into the home.

Air Fresheners and Candles

It sounds counterproductive that the products you use to make your home smell fresh and clean could be doing the opposite to the air you breathe, but it’s true. They steadily emit micro and fine particles into the air causing respiratory issues, especially for asthma sufferers, as well as headaches and nausea.

The best path to a home with clean air is to reduce the amount of pollutants you use, and increase the ventilation through natural (open windows and doors) and mechanical means (a well-working HVAC system, bathroom fans, etc.).

Are you worried about your indoor air quality? Give us a call for an IAQ evaluation!

We All Wave for *iWave*

When it comes to indoor air quality, what you can’t see **can** hurt you. Micro bits of undesirable gunk can circulate throughout your home, populating it with pet dander, dust, pollen, and even bacteria and mold. These elements can contribute to allergy symptoms and take their toll on your health and the ability to enjoy a good night’s sleep.

That’s why we have come to appreciate the benefits of fighting the clean air battle with iWave—a system that works for you day and night, throughout your entire home, with little to no maintenance. The iWave purifier relies on a patented process called needlepoint bipolar ionization (NPBI) technology, which creates both positive and negative ions. The system rests conveniently within your duct system, issuing out the ion cocktail, which then attacks pollutants, stripping them of their hydrogen molecules and rendering them inactive.

Besides being super effective and comprehensive in breaking down harmful pollutants, the additional benefit of the system is that it is truly out of sight and out of mind. Easily installed directly into your HVAC system with no bulbs or parts that need to be switched out, homeowners can enjoy years of cleaner air without a second’s thought.

If you are interested in finding out more about the benefits of an iWave purification system for your home and how it can increase your quality of life, give us a call. We will be happy to discuss the benefits and costs of this addition to your home’s HVAC system.



What Causes a Frozen AC?

How ironic is it that on the hottest day of the season, suddenly you discover that your air conditioner isn't working properly because it's frozen? A frozen AC can and does happen for a variety of reasons, but the good news is that you can identify and fix at least some of the issues yourself.

The balance of an efficient system is a delicate one and relies on the coolant being able to circulate freely and happily. If things go even a bit haywire, problems can ensue. The first clue that you may have a frosty problem is that the air coming through your vents is warm rather than cool. You can verify this by checking the interior for frost or ice on the copper coils. Typically this is caused by one of four problems: poor airflow, dirty coils, low refrigeration, or a poorly working blower fan. Once you've identified that icy conditions exist you can try a DIY approach to correct the problem.

Thaw out the unit.

To thaw the unit out, begin by turning it off completely and allowing it to naturally defrost. We often tell customers to turn the cooling mode off and the fan on to help the thawing go more quickly. Depending on the amount of ice, this could take up to a few hours. During the down time, be sure to check and empty the drip pan to avoid water damaging the unit. It is also a good idea to make a round through the house to open up any closed vents, as poor airflow could be your culprit.

Change the filter.

Once everything is thawed out, run the fan for an hour until everything is dried out. Next, go ahead and change the filter. A dirty filter can be the start of many problems, including a frozen unit. When the air has to work harder to circulate it can cause issues with the pressure. Once you have a brand new filter installed, turn the air conditioner on again, and see if the air begins to cool.

Call the pros.

If this method works, pat yourself on the back and consider yourself a home maintenance genius! If it doesn't, your problem may be a little more extensive and will require a call to have a service professional come out and assess the unit. They will be able to check the fluid levels to ensure the coolant volume is optimum for the pressure requirements as well as check the blower fan. The blower fan is the workhorse of the system, pulling cooled air from the unit and into the home, and pulling the warm air out. Dirty coils can also be the culprit, inhibiting the absorption of water and contributing to poor air flow.

The best way to make sure you don't have a frozen AC crisis in the heat of the summer, as always, is proper maintenance. Set up a pre-season or mid-season check for cleaning and fluid evaluation, and be sure to always keep those filters nice and fresh!

Don't Wait Til It's Too Late!

Don't let your home's hardworking air conditioner suffer the neglect of a busy lifestyle until suddenly the temperatures soar and a problem arises. Your best bet for an uninterrupted, cool, comfortable summer lies in regular inspections and cleaning. Our experts do far more than a quick peek—they assess, clean, lubricate, and adjust your system so that it runs smoothly and efficiently, helping to ensure lower energy bills and correcting little problems before they become big. Call us today to schedule a maintenance visit and to learn how you can save with our Platinum Maintenance Plans.

Come Work With Us!

With so many people spending more time in their homes over the last year, business in the HVAC industry has been booming! We're looking to grow our team to keep up with demand, and if you're a highly-motivated, quality-conscious, experienced service technician or installer, we want YOU.

But why should you want to work with US? We may be biased, but we think we're a pretty great company full of truly wonderful people you'll get to interact with on a daily basis. We've spent more than 70 years building up a reputation as the area's best-rated, most-trusted heating and air conditioning specialists, and our employees love our positive work culture and friendly team. On top of that, our pay and benefits are quite competitive...and our \$5,000 sign on bonus sure doesn't hurt.

Are you ready to work with the best? We know you'll love it here as much as we do. Give us a call or text to find out more!

317-846-0434



The Upstairs Issue

“My upstairs is always hotter than downstairs during the cooling season. What can I do to fix this issue?”

Sound familiar? Have you ever said something similar to your HVAC technician? Don't worry, you're not alone—we hear this complaint, more than any other, regarding home comfort. Here are a couple of suggestions on how to address this problem:

- If it's time to replace the entire hvac system in your home, we highly recommend choosing a furnace with a variable speed blower motor, which is designed to overcome static pressure or resistance within the HVAC system. A standard blower motor will lose a percentage of airflow capacity to resistance while a variable speed motor can adjust its rpm in order to deliver the best airflow possible. While we never sell this as a 100% fix for duct and airflow issues within the home, it is certainly the best “out of the box” option we offer.
- In replacing an air conditioner, the most important thing is to size the new unit correctly. **BIGGER IS NOT BETTER.** An oversized air conditioner will actually make your house less comfortable. It will run shorter cycles and, in doing so, will not dehumidify the home correctly, nor deliver the cold air where you want it—upstairs. When you call us for a new air conditioner, we measure your home and run a cooling load calculation, which pinpoints the correctly sized unit for your home.
- Outside of the HVAC system itself, a great way to make a dent in the temperature differential between the main floor and second floor is to have “active” attic venting. Most homes use soffit, ridge, and box style attic venting. This passive venting method allows your attic to heat up and stay hot all day. We've measured temperatures in passively vented attics on a hot summer day that have exceeded 160 degrees. This heat infiltrates into the second floor, making it difficult to cool your upstairs. We sell and install power attic fans to help reduce this infiltration and to keep your attic much closer to the outdoor ambient temperature. These power attic fans typically install for \$1250-\$1500 but can save you plenty on home cooling costs. Some of the new power attic fans also come equipped with high efficiency motors (ECM) which will cut electrical consumption on the fan by around 50%.
- Perhaps you only have one room upstairs, such as a bonus room above a garage, that seems to have issues staying cool in the summer (and possibly also staying warm in the winter). Ductless mini-splits are available as cooling only or heating and cooling systems. The most common of these applications includes a wall-mounted indoor unit and an outdoor unit. There are also options available to have multiple indoor units connected to just one

outdoor unit. Appel is a Mitsubishi Diamond Dealer, and we are able to offer the best mini-split systems on the market with the longest warranties of any mini-split manufacturers.

- Lastly, if you're looking for the ultimate in second floor comfort, a secondary system will provide you the indoor climate you've always wished you could have. These systems are also available in cooling only or heating and cooling. We typically install a complete secondary duct system in the attic with new supply registers and return air grilles, plus a new cooling unit and either a furnace or an air handler unit. With a secondary system, we can guarantee 100% comfort, 100% of the time, no matter what the conditions are.

COVID Precautions

As you consider your home maintenance needs during the constantly changing landscape of COVID, you can rest assured that at Appel we are adapting and adopting the latest protocols when it comes to keeping our employees and our customers safe. If you have special requests while our service experts are in your home, please let us know and we will be happy to accommodate. Our top priority is your health and safety. Until we see you again, best wishes for good health and happiness!

Opt For Outdoors

As life eases back to normal, we look forward to spending time with our families, taking advantage of some of the fun outdoor offerings in and around Carmel. A list of our favorites is long but we will highlight just a few:

- **Concerts at Clay Terrace** every Thursday from 6-9pm. There is nothing quite like enjoying a picnic dinner and live music during the summer. The featured music changes weekly, ensuring you will find old and new favorite tunes.
- **The Monon Waterpark** helps families beat the heat and have a great time doing it. Rest easy on the lazy river, or indulge your wild side on the slides—you are sure to have a great time!
- **The Carmel Farmers Market** has a reputation that can't be beat. With numerous vendors offering a wide variety of fresh produce, meats, cheeses, beverages (and on and on...), your time in the kitchen this season will be a joy.
- **Midtown Carmel** is booming! Plan for an evening dining outside at one of the new restaurants or take a walk on the Monon. The sights and sounds of summer will be on full display.

Savoring a midwest summer is a true joy, and we look forward to every moment!



HVAC FAQs

When you've been in the business for as long as we have, you tend to notice patterns in the questions customers have about their HVAC systems and equipment. We asked our technicians what they hear most out on the job, and here's what they had to say:

How much does new HVAC equipment cost?

Equipment pricing can vary, depending on what brand and efficiency of equipment you want to look at. We can provide a wide range of pricing for the homeowner but the best way to get a definitive price is to have a salesman come to the house and discuss all of your options.

What brands does your company sell?

American Standard and Rheem are our primary brands. We've used both for over 30 years and are absolutely confident in recommending them for our customers' homes.

Do you install water heaters?

Yes! We sell and install water heaters.

How long does it take to install a humidifier?

It usually takes between 3 to 3.5 hours in most circumstances.

What kind of filter should I use, and when should I change it?

Standard 1" filters are ok but do require monthly upkeep. Larger media filters will last longer and give a greater surface area for dust collection. There really is no right or wrong filter as long as it is maintained. 1" filters need to be changed monthly, larger media filters should be changed approximately every 6-12 months.

What temperature should I set my thermostat at?

Thermostat set temperature is all about customer comfort level. It may take some adjusting to get to what feels good for you (and keeps all the other members of your family happy).

How do I clean my outdoor AC unit?

Using a standard garden hose and nozzle is sufficient for cleaning the outdoor unit. Do not use any kind of high pressure sprayer as it could damage the unit.

How does the iWave R work?

The iWave R uses bi-polar ionization to charge particles in the air, which then end up being collected at the filter.

What are the benefits of having a maintenance plan?

On top of the higher efficiency, lower fuel bills, and prolonged life a well-maintained system can give you, our Platinum Maintenance Plan includes:

- Two clean & checks per year (one heating, one cooling)
- Priority scheduling & service
- 15% off repairs
- No overtime repair rates (ever!)
- \$15 discount on diagnostic fees
- 100 % satisfaction guarantee

Are your guys required to use PPE?

Yes, we take all the precautions necessary, both to comply with local municipality's requirements and to keep you safe.

Do you have any other helpful tips?

Do your best to wake up with a positive attitude, and make your bed so you'll feel you've accomplished one task...even if you accomplish nothing else the entire day.

The 5,000 Rule

As much as we love to bring you the ultimate in comfort and efficiency, especially during the sweltering heat of summer, there are times when our technicians have to be the bearers of bad news. It's inevitable that at some point you'll have to choose between an expensive repair or full replacement of your unit. This dilemma ushers forth a myriad of secondary questions, including:

- What kind of extended life can you expect if you do the repair?
- Is something new going to go wrong next week or month?
- Are you throwing money into a unit that will continue to falter?
- Or will the fix give you another 5 years of cooling?

You'd practically need a crystal ball to answer all the questions that pop up nearly immediately upon hearing a repair quote. Luckily, we have a handy rule of thumb for situations like these. It's called the 5,000 Rule, and it's an easy and pain free way to get some real direction towards what decision to make.

To employ the 5,000 Rule, simply take the age of the unit and multiply it by the estimated cost of the repair. (If you don't know the age of the AC unit, check the manufacturer's nameplate which is located on the condenser box outside your house.) If the number is less than 5,000, it probably makes good sense to do the repair. If it's over 5,000, it's probably time to seriously consider a replacement.

Ex: Your AC unit is 10 years old, and the cost of the repair is estimated to be \$400. $10 \times 400 = 4,000$, so it likely makes the most sense to proceed with a repair.

Outside of the 5,000 Rule, there are other considerations that are unique to each homeowner, including the SEER Rating of your unit. The SEER Rating is the Seasonal Energy Efficiency Ratio and is formulated by the system's

total cooling output compared to total energy consumed. It allows for apples to apples comparison of air conditioning models. If the SEER rating of your unit is a 10 and you can upgrade to a 16, for instance, you'll end up saving some money on your utility bills each month (and you'll be helping the environment, too). Currently the minimum SEER Rating for a newly installed unit in Indiana is a 13.

An additional consideration to keep in mind is the refrigeration type used in your current unit. Federal mandates have discontinued the once standard R-22 coolant, and that can have a real impact on the cost of future repairs.

The nice thing about calling Appel is that our experienced service professionals are adept at taking you through the pros and cons and helping you reach the right decision for your home. Top that kind of customer service with our incredible specials and financing, and you will find yourself with an excellent solution.



Tame Your Spring Allergies

With all the beauty the changing seasons bring, along with it comes a fair amount of misery for allergy sufferers. Fortunately, there are a few things you can do to tame the watery eyes, sneezing, and general malaise.

- If you like the cool breeze of open windows, wait till after the morning hours to open them. Many trees release their pollen when daylight hits, so holding off a few hours will help.
- Change your clothes when you walk back in the house from yard work. You'll be bringing in the outdoors with you, and it's best to put those in the washer immediately. Leaving your shoes at the door can help too.
- Vacuum often, and use a high-quality vacuum cleaner with a HEPA filter. They really do make a difference.
- You knew we'd say it...change those filters! Your AC system works best at collecting undesirable particles in the air when it has a clean and fresh filter.
- Consider installing an air purification system. An iWave, for example, will help battle that pesky pollen, dander, and dust in your home (and does it all maintenance free). Call us today to learn more.

Summer is Coming....

The seasons are changing here in Central Indiana, bringing along some much appreciated warmer weather. Soon, though, that gentle breeze will wander off, leaving us stuck in the middle of another hot, sticky Midwestern summer. Are you ready?

We get it...HVAC expenses may be furthest from your mind while you're taking advantage of these mild temps, dining al fresco on your back porch or playing catch with Fido in the park. But we have several deals going right now that will take some of the heat out of those home budget woes. For example, you can save up to \$2,250 on a high-efficiency heating and cooling system, plus get 18 months FREE financing for all qualifying purchases.

Your neighbors know that NOW is the time to jump on maintenance or replacements for their HVAC systems, and our pre-season demand is skyrocketing. Make sure you get on the list early, and don't get caught in the 90+ degree heat with a faulty air conditioner! Give us a call today to schedule a visit.



\$250 Off

any new whole-house dehumidifier

Valid May 20 - June 20, 2021

Cannot be combined with any other coupon, Platinum Plan discount, or special offer. Please present coupon at time of service.

Appel Heating & Air Conditioning
www.appelheat.com

\$500 Off

any new whole-house air conditioner

Valid May 20 - June 20, 2021

Cannot be combined with any other coupon, Platinum Plan discount, or special offer. Please present coupon at time of service.

Appel Heating & Air Conditioning
www.appelheat.com

\$50 Off

any repair service call for your heating or cooling system

Valid May 20 - June 20, 2021

Cannot be applied to diagnostic fee. Cannot be combined with any other coupon, Platinum Plan discount, or special offer. Please present coupon at time of service.

Appel Heating & Air Conditioning
www.appelheat.com