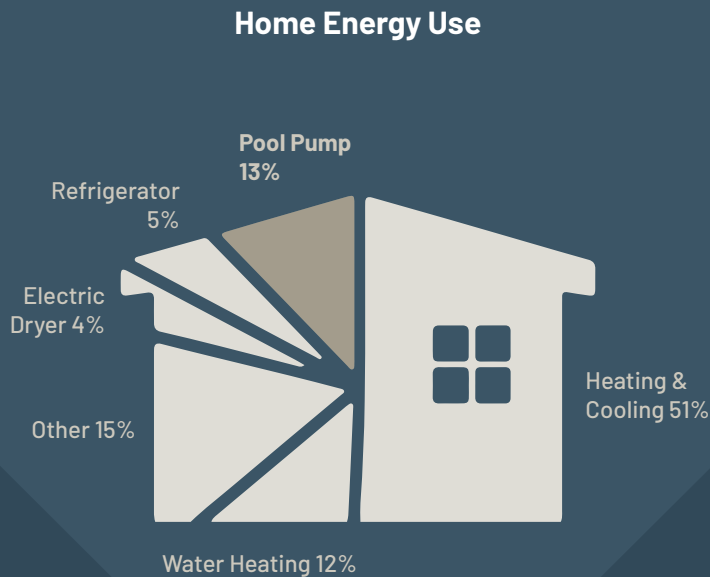


A Snapshot of the Upcoming

DEPARTMENT OF ENERGY DEDICATED PURPOSE POOL PUMP (DPPP) FEDERAL ENERGY EFFICIENCY REGULATIONS

Did you know...

Pool pumps can be the
**#2 CONSUMPTION
OF ENERGY**
in the house?

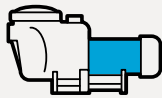


What does this regulation mean for pool pumps?

Pool pumps **manufactured** for use in and imported for use into the U.S. **after July 19, 2021, must meet new minimum efficiency standards.**

Are the new minimum efficiency standards the same for all pumps?

- a. No. What we typically call an **inground pump** will be classified as **self-priming**. Self-priming pumps will be categorized as large and small. Each have different efficiency requirements.
 - i. **Large inground filter pumps (self-priming)**— These are typically 1 horsepower (HP) and greater. A variable speed pump is the only pump that will meet the minimum performance requirement based upon today's current technology.
 - ii. **Small inground filter pumps (self-priming)**— These are typically 0.5 HP and 0.75 HP. Highly efficient single-speed or two-speed pumps should meet the minimum performance requirements. **Note: The new regulations establish much higher efficiency standards. The majority of existing single-speed pumps will not meet the new minimum requirements.**
- b. What we typically call an aboveground pump will be classified as non-self-priming. **While less stringent than inground pumps, they must still meet new minimum efficiency standards.**
 - i. **Aboveground filter pumps (non-self-priming)**— An energy-efficient, single-speed or two-speed pump should meet the minimum performance requirements. **See above note (aii) regarding the higher efficiency standards.**
- c. **Pressure cleaner booster pumps** also have minimum performance requirements.
 - i. Energy-efficient, single-speed booster pumps should meet the new efficiency requirements. **See above note (aii) regarding the higher efficiency standards.**



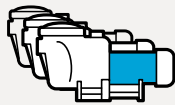
What about other pumps?

- a. The following pumps **do not have** minimum performance requirements:
 - i. Waterfall pumps (1,800 rpm max)
 - ii. Filter pumps with integrated sand and cartridge filters (e.g., small inflatable pools)
 - iii. Rigid (permanent) and storeable (inflatable) electric spa pumps (e.g., pumps for hot tubs)



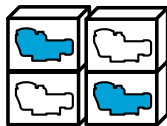
Are there any exemptions?

Three-phase pumps, electric spa (hot tub) pumps and pumps greater than 2.5 HHP (approximately 5 total horsepower [THP]) do not have minimum DPPP efficiency requirements.



Do I have to replace the installed base of existing non-compliant pumps?

No. This regulation does not require bringing all existing installed pumps into compliance. However, pump replacements made after July 19, 2021, will require a compliant model.



If my distributor still has remaining inventory of non-compliant pumps, can I purchase and install these pumps?

Yes. There is no time limit on how long it takes to purge distribution of non-compliant products.



How will these changes affect HP ratings?

HP ratings will be redefined so that all pumps have a Service Factor of 1.0, and the HP displayed on the pump will be the THP (also referred to as Service Factor Horsepower [SFHP]). This **new rating methodology will eliminate dual full-rate and up-rate** labeling existing today



What happens when an existing single-speed pump fails after July 19, 2021? Can I replace it with another single-speed pump?

- a. It depends on the pump classification.
 - i. If the replacement is on a **large self-priming pump**, then the answer is no.
 - ii. If the replacement is on a **non-self-priming or a small self-priming pump**, then an energy-efficient, single-speed replacement could be an option.



What are the new terms/definitions and labeling requirements?

- a. WEF (**W**eighted **E**nergy **F**actor)—This is a measure of the pump's energy efficiency (how much water is pumped divided by how much energy it takes), similar to miles per gallon in an automobile. The higher the WEF, the more efficient the pump. Each pump must be labeled with its WEF.
- b. HHP (**H**ydraulic **H**orsepower)—This is the amount of hydraulic power produced by the pump's wet-end.
- c. THP (**T**otal **H**orsepower) or SFHP (**S**ervice **F**actor **H**orsepower)—This is the **new pump HP rating** and is determined by the total HP created at the motor shaft. Each pump must be labeled with its THP.



Does it impact residential *and* commercial?

Yes. Both are impacted. The regulation does not differentiate between a residential or commercial pump. It is based on the pump's physical attributes and not on the pump's application (see exemptions above).