





## So What Exactly Does It Take To Install A FEMA Trailer?



The Belle Chasse Naval Air Station in Plaquemines Parish, Louisiana serves as the staging area for trailers in Louisiana.

Installing temporary housing has proven to be a much more complicated and involved task than most people would imagine. CH2M HILL is one of four prime contractors working for FEMA (Federal Emergency Management Agency) installing travel trailers, park homes and manufactured homes in Alabama, Mississippi, Louisiana and Texas following Hurricanes Katrina and Rita. CH2M HILL is the only contractor performing work in all four affected states.

Under the contract, CH2M HILL is responsible for assessing sites as well as hauling, installing and maintaining temporary housing units. Each phase has its own challenges.

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Housing units are placed in three primary sites. Private sites are most common with units placed directly on private property, typically in someone's driveway or front yard. Group sites house multiple units and are built because of the hurricanes. Commercial sites are existing property, typically in commercial trailer parks or campgrounds, which have all the necessary utility hookups and are ready for occupancy. At these sites CH2M HILL works with FEMA to negotiate leases on the property and then leases-in evacuees.

#### Site Assessment

It is FEMA's responsibility to determine who is eligible for temporary housing and what type of unit the family qualifies for based on family size and circumstances. Once FEMA has determined eligibility the Agency issues a SIR (Site Investigation Request) to CH2M HILL, which gives the green light to proceed with a site assessment to determine feasibility. FEMA has requirements for what makes a site feasible, in addition many of the parishes, counties and cities have their own codes and regulations. The first step is getting permission from the owner to enter private property. Because many people evacuated to other parts of the country, it can be difficult and time consuming to get in touch with the resident. Assessors meet with the resident to learn more about their circumstances and to find out if they own or lease the land. Temporary housing can only be placed on privately owned property; if the resident leases the property, they cannot install a temporary housing unit and must move to a group site. Safety is always a concern so there must enough space to install the unit a safe distance back from the road. Space is a big issue, assessors determine if there is enough space to install and deliver the unit. For instance, a manufactured home requires 5000 square feet and the unit cannot be located within 15 feet of the drip line of a live oak. Units cannot be placed in a flood plane, so topography assessments are taken. Finally, the assessors need to determine if utilities (electric, water and sewer) are available on site or if they new lines would need to be installed. Typically, on private sites CH2M HILL can tap into the existing lines.



The Carlos Ladner site is under construction in southern Mississippi.



Group sites require that FEMA secure a lease for the property and then directs CH2M HILL to assess the site. CH2M HILL's engineers and architects prepare designs, which are presented to FEMA and local officials for approval. Once the design receives sign-off a team of general contractors gets to work building the site, installing utilities, erecting a perimeter fence, and eventually installing the actual housing units.

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"What we are doing is fast-paced design-build construction of mini-subdivisions, complete with infrastructures, such as water, fire and sewer mains, electrical compliancy and roads," said Bob Reichold, CH2M HILL's operations manager for group sites in Louisiana.



Each trailer must be properly blocked with concrete blocks and anchored down for stability.

"Each group site requires at least 21 days for the design phase and another seven days for the procurement phase," said Hesham Hatabeh, one of CH2M HILL's design managers. "The design manager is fully responsible to meet all local, state and federal codes as well as the requirements through at least two presentation meetings with different government entities. In these meetings the design manager presents both 50 and 100 percent of the design review packages that meet all of the above government entities standards and regulations before the project kicks in the contracting vehicle."

#### **Haul & Install**

If a site is determined feasible, the local permits are obtained to place and install the unit. Once the paperwork is completed, a unit is hauled from a staging area to the site where it is properly blocked and anchored. Roughly, 80 percent of units installed are travel trailers. Each type of housing unit has its own installation specifications, as well as details for installing and hooking up utilities. CH2M HILL has hired predominantly local subcontractors to perform this work. Once the unit is installed, it is made ready for occupancy (RFO) which includes prepping the interior of the unit, including arranging furniture, activating utilities, testing appliances and cleaning up the site.

CH2M HILL staff then conducts a quality control inspection to ensure everything has been properly installed.

### **Utility Hookups**

Before a resident can move into the unit all utilities must be activated. This has proved to be one of the largest snags in the process. The hurricanes damaged power lines, which are still slowly being restored, so not every area has power, particularly the more rural or outlying areas. Sometimes CH2M HILL and its subcontractors are able to install a T-pole onsite, but the power company is overwhelmed and cannot always get someone out to the site immediately. In addition, CH2M HILL can make sure power is installed, but cannot actually set up an account for the resident. Many residents were in arrears on payments prior to the storm and the power company is hesitant to open new accounts for these people. Therefore, there are times when a trailer is installed but sits empty on a property until the resident has opened utility accounts and all utilities are turned on.

#### Lease-In

Typically, CH2M HILL leases-in the family, however in Alabama this role was taken on by FEMA and in Texas by the U.S. Army Corps of Engineers. During lease-in, the family is given the tour of their new home and shown how to work all the systems. This is an on opportunity for the resident to ask questions and get comfortable with their new home. The final phase is turning over the keys to a smiling resident.

#### **Maintenance**

CH2M HILL is also responsible for maintaining trailers. This involves a monthly preventative maintenance inspection as well as responding to any maintenance calls the resident makes to an 800 number for anything from changing propane tanks to fixing water leaks or draining sewers.

"Safety is a big part of what we do," said Dan Fukuoka, a CH2M HILL maintenance supervisor in Louisiana. "We need to look out for the safety of occupants because living in a trailer is a new experience and residents don't know what to look for. That's what we're here for, to help, even if it means going back to help educate people on how to operate their trailers or helping an elderly resident change a light bulb."



As part of the lease-in process CH2M HILL staff walks the resident through their trailer and explain how to operate all the systems. "Education has been a big part of it, teaching people how to run their trailers because it is a new experience for most people," said Jim Beeman, a CH2M HILL maintenance coordinator (pictured).