

Exclusive to: NIBCA's *Dimensions*  
December 2, 2008  
Word count: 527  
Submitted by Kate Wilson of the SEEP Committee



**BMP of the Month (DECEMBER):**  
***A good time for construction equipment maintenance***

Work is much more difficult during the cold winter months. The drop in temperature is hard on our hands, faces, and construction machines. Given our winter calendar, though not as drastic as some places, it is sometimes necessary to use construction equipment in the cold. If you are on a tight timeline or have an emergency project and need to use your equipment, just remember to give it a little extra attention at the end of the day; everything takes longer in the cold weather—cold hands, cold tools, and cold engines.

If possible, the best thing you can do for your construction equipment and heavy vehicles is park them indoors during the winter months. If you have access to a large, heated, indoor storage space, consider yourself very fortunate. It is a good time and place to take care of preventative maintenance tasks too. Besides keeping your equipment in good working order, storing machinery and buttoning up sites in the winter reduces the need for erosion control measures and the risk of sediment spreading from your site when the weather warms.

If you are constructing projects during the winter, costs can be higher, especially for a small contractor. Increased costs for contractors during the winter are estimated to be about 20 percent, even more if there is a lot of snow. One factor that makes winter construction more expensive is the season's impact on equipment. At minus 20, metal can start to become brittle. There's no hard and fast temperature rule, but generally it's pretty much impossible to run equipment when it's below minus 30 degrees.

At very cold temperatures, equipment needs special oil and other fluids. Automotive and construction equipment is designed, most commonly, for temperate conditions and is seldom suitable for use at low temperatures without modifications of the lubrication schedule and starting procedure and the addition of heating units. Remedies for low-temperature problems are being developed, and active research on new methods and improvements of existing techniques continues.

Regular preventative maintenance on construction equipment includes special attention to: brake adjustment, coupling devices, locking devices, exhaust systems, no leaks, working lights, rear view mirrors and horns that must operate, fire extinguishers and triangles on board, steering, ball joints, suspension, u-bolts, springs, and frame members.

In addition, tire wheel clearances must be met, wheels and rims must be in good shape, tires must meet the standard, windshield wipers and defrosters must operate, interior gauges must work properly, hoods and bumpers have to be in place and operating, and mud flaps must be at the required distance from the ground.

Cold climate equipment maintenance differs slightly in maintenance methods than warmer climates and must meet weather conditions for the equipment to operate properly. Contractors want their equipment to last through many seasons and equipment must accommodate a maintenance schedule that prevents technical and weather-related problems. Pay close attention to the needs of your equipment so that it may be useable as long as possible. Try to put it away during those cold winter months. Take the time to give it a close look and a friendly pat on the steel back. Our machines work hard for us.