

# In-Ground Hydraulic Automotive Lifts – Replace Or Maintain?

## WHITE PAPER

IN-GROUND HYDRAULIC LIFTS HAVE BEEN A STAPLE OF AUTOMOTIVE REPAIR AND INSPECTION FACILITIES SINCE THE MID-50s. BECAUSE THEY HAVE BEEN AROUND FOR SO LONG AND WERE THE ONLY TYPE OF LIFTS FOR MANY YEARS, THERE ARE MANY IN-GROUND LIFTS THAT ARE IN DIRE NEED OF REPAIR OR REPLACEMENT. MANY OF THESE OLD LIFTS HAVE POLLUTED THE ENVIRONMENT BECAUSE THE HYDRAULIC FLUID USED IN THEM CAN LEAK INTO THE SOIL AND GROUNDWATER. IN SOME CASES, THE IN-GROUND LIFTS CAN BE CONVERTED TO BECOME MORE ENVIRONMENTALLY FRIENDLY, BUT IN MOST CASES FULL CONVERSION TO ABOVE-GROUND LIFTS IS THE BEST OPTION.

### The Potential Environmental Impact

In-ground lifts are extremely prevalent because they were the only type of auto lift constructed up to the 1970s. In most cases, the cylinders are constructed 6'-8' below surface grade (bsg) and contain hydraulic fluid. And to make matters worse, all hydraulic fluid was petroleum based until just a few years ago. If the lifts have not been inspected regularly or maintained properly, the soil or groundwater could be negatively impacted. Automotive facilities that have in-ground hydraulic lifts currently in place should have them checked for leaks.

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If your in-ground hydraulic lift has been leaking, the cleanup costs can be substantial. These costs can vary depending on the extent to which the environment has been impacted. The cost for the initial investigation can range anywhere from \$6,000-\$7,000.

If it is determined that the soil has been impacted, the cost for cleanup could range from \$25,000 to \$35,000. If the groundwater has been impacted, the costs can be as high as \$75,000 for cleanup.

### To Repair or To Replace? That is the Question.

There are three scenarios that you could be in if your facility owns and operates in-ground hydraulic lifts:

1. *You have a functionally sound lift that has been inspected and is found to be leak-free.* In this case, you are fine. The possibility exists that a leak could occur, but if you continue to have it inspected regularly and maintain it, you should significantly decrease the chances that you will have any costly leaks or environmental problems. As a precaution, you might consider moving to a vegetable oil-based fluid. This will significantly decrease any potential environmental impact, as this type of fluid is 100% biodegradable within a relatively short period of time.

2. *You have an old lift that has not been inspected.* If you are in this situation, now is the time to act. You need to have a qualified environmental consultant come out and inspect the soil and groundwater. If there has been an impact, cleanup will be required, and your lifts will need to be repaired or replaced.
3. *You have an old lift that needs repair or replacement.* There are many options for you. The recommended option would be to purchase and install above-ground lifts. These are completely environmentally friendly and are significantly less expensive than in-ground lifts. The biggest drawback to an above-ground lift is a significantly bigger footprint. In that case, you would either need to increase the necessary space or decrease the number of lifts to fit a certain size facility (roughly 11 above-ground lifts to a space where 12 in-ground lifts would fit). Another option would be to replace it with a more environmentally friendly in-ground lift. Currently, lifts are available that require 50-95% less hydraulic fluid than older lifts and that have sensors and leak detection systems. An additional consideration would be to purchase a lift with shallower in-ground components that are enclosed with the oil tank, thereby all but eliminating the danger of oil discharge to the subsurface.

### **Inspection is the First Step**

If you own and operate in-ground hydraulic lifts, you need to have them inspected for potential issues by a reputable licensed environmental consultant. You can save your company significant money if leaks are caught early or, better yet, if problems are detected before a leak occurs. As with anything related to the environment, early detection can save considerable amounts of money and hassle.

#### **SIERRA PIEDMONT CONTACT INFORMATION**

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