DRYCLEANER ENVIRONMENTAL RESPONSE PROGRAM

Newsletter

Fall 2011

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Why do we have DCERP?

This program provides value to dry cleaners and state residents in many ways, but one important program function is to help educate both the general public and the industry (facility owners and operators, property owners, solvent suppliers, etc.) about dry cleaner environmental concerns. Although the finished product is well received i.e. professionally cleaned garments, the dry cleaning industry has traditionally not been environmentally friendly. Old methods of solvent and waste disposal, older less efficient machines and spills related to solvent delivery illustrate some examples of how cleaning solvent has historically been released or lost into the environment. Based on our present understanding of environmental exposure and risk these ***past practices represent real environmental issues that are problems today.*** Fortunately through education and equipment improvements the modern dry cleaner is doing much better at preventing spills and has made important strides to address problematic practices. Although several improvements have been implemented to help prevent solvent spills such as secondary containment around machines, cleaning solvent delivery via closed loop mechanisms, proper disposal of wastes, and the advent of Best Management Practices, etc. we continue to have a legacy of old problems that have been left for us to address. ***Addressing these legacy concerns is an important service that DCERP provides to the dry cleaning community.*** In Tennessee, DCERP provides a mechanism for parties to conduct investigations and clean-up activity at active and former dry cleaner sites. Without question, site actions conducted under DCERP have been instrumental in finding and removing dry cleaner contamination from the environment and with protecting the public and dry cleaner plant workers. Although these investigation and clean-up actions at dry cleaners is conducted using DCERP fund money we believe that many in the industry are not aware of the constraints facing this aspect of the program. There are many factors to consider, please continue to read in order to gain a better understanding of DCERP.

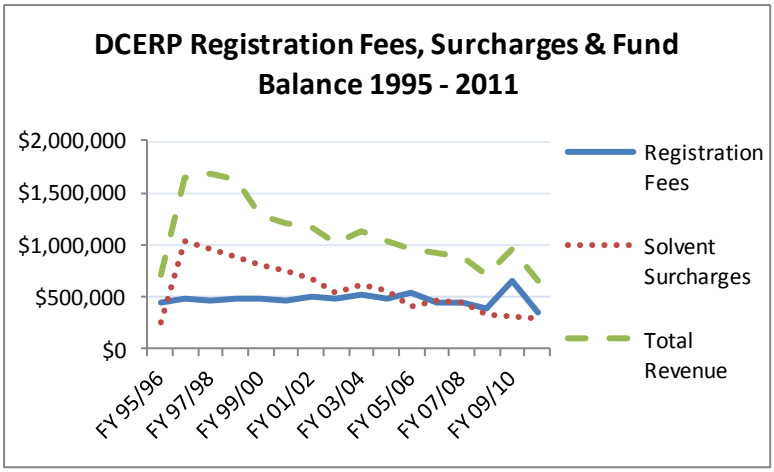
Inside this issue:

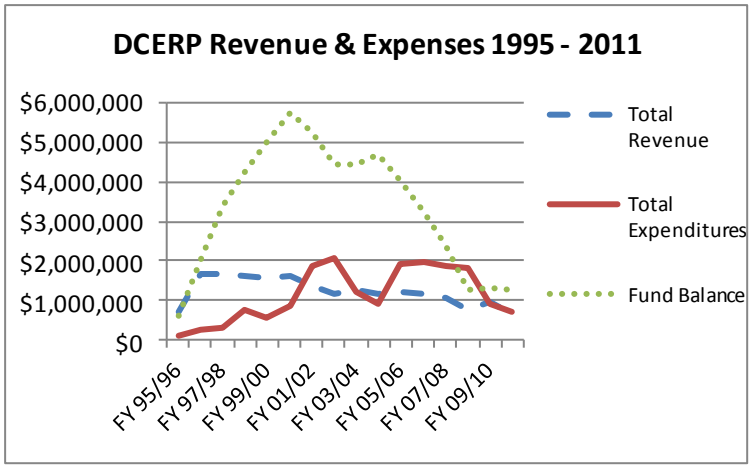
Upcoming Dates

- The next DCERP Board meeting will be held in Nashville on November 7, 2011
- The last Environmental Compliance Training Class for 2011 will be held on December 12, 2011. Please call 615-532-0932 to reserve your seat.

Why did my fee increase this year?

Registration fees for many facilities have increased compared to previous years' registrations. For 2012, fee changes and an increase in solvent surcharges were approved by the Drycleaners Environmental Response Board on July 13, 2010. ***These changes were developed from recommendations made by the DCERP Task Force Study Report (November 2009).*** The Task Force was formed to evaluate the program and to make recommendations for actions that would make DCERP and the DCERP Fund more effective and viable. The Board implemented these changes to address the fact that a funding increase was necessary to continue the program's environmental efforts. If the Board had not taken this action, the Fund would be less financially viable and only a limited amount of emergency environmental activities would have been possible going forward. The fee increases and deductible changes were considered interim solutions. ***The Task Force and Drycleaner Board both agreed that long term solutions for DCERP involve either diverting the state portion of the sales tax on dry cleaning to DCERP or establishing an industry specific gross receipts tax***. Neither of these long term solutions is feasible given the current economic situation. The following graphics illustrate program revenue trends from FY95/96 through FY10/11. Over time program revenue from registrations has remained relatively constant while solvent surcharge revenue has been steadily declining. Historically more revenue was collected during the early years of the program (the revenue high was 1.7M in FY97/98) than has come in recently. For the FY10/11 total fund revenue was $650K. The unfortunate truth is the program is underfunded. The current revenue stream is hardly adequate to address known sites and will not be sufficient to address undiscovered legacy sites.





What happens to the Fund Monies generated from registration fees?

"DCERP Fund money is used exclusively to address environmental concerns at active and former drycleaners and to cover program administrative costs."

Registration Fees and Solvent Surcharges are the only source of income that the program has to pay for investigation and environmental cleanup of sites impacted by dry cleaning solvents. The Fund does not receive any appropriations from state or federal sources, i.e. no state and federal taxes go to support DCERP. DCERP Fund money is used exclusively to address environmental concerns at active and former drycleaners and to cover program administrative costs. The administration of the program is operating in an extremely lean manner in order to minimize program administrative expenses. Also, DCERP typically authorizes site work in a phased approach to both minimize wasting resources and to limit program commitment to large expenses. Recall that we earlier discussed the legacy issue related to historical dry cleaner operation. ***We know from experience that almost all dry cleaners have had releases or spills to the environment.*** Unless your operation is new or has only operated less than a few years it is likely that there has been a site solvent release. This means that many of you will eventually enter the clean-up side of the program and that you will rely on the program fund for clean-up unless you decide you would rather pay for investigation and clean-up costs using your own resources.

Who can enter the clean-up program?

Excavation at a former drycleaner facility in Williamson County

All active and former dry cleaner locations can apply to voluntarily enter the environmental clean-up side of the program. By virtue of maintaining an annual registration, an active facility only has to submit an application to enter the program. When a former dry cleaning location (referred to as an abandoned facility) enters the program they have to pay an annual registration fee (increased from $1,500 to $2,500 for 2012) and must become current on all past registration fees. For an abandoned facility that has never registered (before 1996), the past due program registration fee presently exceeds $33,000.

Why are program activities so expensive?

Investigation and restoration activity is expensive and few sites are easily cleaned up. In addition to urban and man-made obstructions there are many complicated factors such as geology (sand, silts or clays versus bedrock conditions), depth to ground water (is first water shallow, deep or in bedrock?) and site chemistry (is the site geo-chemistry favorable for remediation?) and other constraints that generally hinder rather than help remediation efforts and which add costs to projects. A recent EPA publication that discusses remediation at dry cleaners is: "A Citizen's Guide to Dry Cleaner Cleanup". This pertinent document briefly describes clean-up methodologies that are being used at dry cleaner sites and can be accessed through the following link:
http://www.drycleancoalition.org/download/citizens_guide_drycleaner_cleanup.pdf Please review this material to obtain a general overview of dry cleaner related remediation considerations.

Typical cost considerations include the following:

Tennessee has unique and interesting geography and geology. Unfortunately this also means that we have a variable and complex subsurface geology. ***The site's geology will control how contamination moves through the subsurface and will be a limiting factor regarding selecting investigation methods and remediation techniques.*** For example, the way a solvent spill moves vertically and laterally in the sands, silts and clays (western Tennessee) will be expected to be different from a similar spill into weathered shale (east Tennessee). In layman terms this means that there is no single proven or guaranteed method that DCERP can use at all sites. ***All sites are unique and usually will require a site specific approach to achieve a successful outcome.***

Another program consideration is that Perc is a dense dry cleaning solvent. This means that Perc is heavier than water and will sink when released into the subsurface. For this reason, solvents like Perc are considered to be persistent in the environment and are harder to find and clean-up as compared to a floating product like petroleum solvent. Again, the fact that Perc sinks coupled with problematic geology causes difficulty with clean-up at DCERP sites.

DCERP also has site access concerns. Since the investigation and remediation process is usually intrusive, our initial focus will be related to identifying underground utility lines and the possible impacts utilities have to the release. Then we have to determine and work around conducting the investigation or clean-up while the site business is trying to operate. These factors will impact our ability to move equipment at the site and the type of remediation that we might consider implementing.

Mixture of injection liquids used to treat groundwater. A single injection at a site can cost from $75,000 to $150,000.

You might wonder why you should care about dry cleaner spills into soils or ground water. You believe that because you don't drink the water or contact the soils that things are OK. Unfortunately, you may not be OK because buildings are subject to Vapor Intrusion. ***Vapors from subsurface contamination can emulate from the subsurface into buildings through cracks and gaps and into your work or living space.*** Exposure to Vapor Intrusion has been found to represent a serious threat to human health. What this means to DCERP is the program routinely conducts vapor testing at program sites and we are discovering that many sites are impacted. Addressing the Vapor Intrusion issue is now an additional unanticipated cost burden that the program is bearing.

Consider the following illustrations of typical program costs, please note these examples are being used to illustrate relative costs, every site is different and usually remediation will cost more than we think. ***Sites may also have problems with soil, ground water, vapor intrusion, or problems in all three areas.*** In the situation where all media is impacted investigation and

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clean-up costs will be substantially higher. The following examples are also only for site remediation and do not include the expense of site investigation or characterization that is required to develop the selected remediation strategy.

Example A. The program favors source control. This means we try to find very contaminated soils and remove them from the site. When possible, the removal of shallow impacted soils usually represents our best option. Consider the expense and possible disruption involved if the impacted soils are under the floor of your business. Even in a simple situation this would involve cutting through the floor, digging up the hot soil (i.e. highly impacted), placing those soils in a secure container, replacing the excavated material with clean soil and patching the floor. Also, soil removals of this type are usually limited to a maximum 15-foot depth. Consider the possible cost if business operations had to shut down for several days to accommodate a soil removal action. A small discrete soil removal action could easily cost $20,000 to $30,000 or more plus the cost of properly disposing of the soil. If the soils removed from the site are classified as hazardous waste, then the cost of the soil disposal could also be an additional $20,000 to $30,000. The cost of larger sized source removals will be significantly more expensive than the above example.

Example B. Consider a situation where impacted soils are present at depths greater than 20 feet under the facility and the depth to ground water is greater than 50 feet. Due to the depth these soils cannot be excavated (equipment limitations), but the soils represent a risk to the ground water which in this example is located below grade at a depth of 50 feet. If we can't excavate, the next best clean-up method is usually to treat the soils in place (known as in-situ treatment) using a chemical injection to neutralize the contamination. But, since this method doesn't work in dry soils that are above the water table, we are unable to consider this as a treatment option in this example. Our only remaining soil treatment option is soil vapor extraction. This technology requires installing several wells through the impacted soils and then connecting these wells to a treatment system which employs a vacuum to capture contaminated vapors from the soil. There are numerous cost factors involved in this example. The cost to install the vapor wells will be a minimum $20,000, the cost of the treatment system and related plumbing will be $30,000 or more, annual operating and maintenance costs may be $10,000 or more, and costs for monitoring and reporting will easily be $15,000 per year. Such a system may have to run for several years before site soils are remediated. The total cost to install and run this sort of system for a 2 year period can easily exceed $100,000 assuming the system functions as it was designed.

Example C. This situation is the same as Example B except the impacted area includes wet soils that are below the water table. We would be able to use chemical injection as an in-situ treatment method in this situation because these soils are below the water table and ground water movement will help disperse the treatment agents. Treatment at a typical facility will involve one or two days of on-site subsurface injection activity and follow-up monitoring and reporting for a year. The cost of this treatment may range from $75,000 to $150,000 or more. Experience has shown that one treatment is usually not sufficient to accomplish the remediation and follow-up treatment(s) may be required. Expect site expenses to exceed $200,000 to $250,000 or more if this approach is used for site clean-up. This approach will also have additional costs related to long-term monitoring.

Site restoration. As we have described, addressing contamination issues at dry cleaner sites is both expensive and difficult. It may also take a considerable amount of time (i.e. years) to complete site investigation and clean-up. ***We know that contamination at most sites is not the result of a single spill, but is typically the result of many small releases that occurred over several years or decades. Most sites that have entered the program for cleanup reported they never knew of a specific spill or release of solvent yet virtually all have been impacted.*** Older machines and historical solvent waste disposal practices have resulted in many sites being impacted. What does this mean to the DCERP? It means that site clean-up will probably take longer than we would like because we do not have sufficient funding to aggressively address sites. What would happen if DCERP did not pay for site clean-up? ***If DCERP did not bear the majority of these costs for you, you could be responsible for paying for the clean-up using your own resources***. Remember, the money you pay to DCERP comes back to the industry through program investigation and remediation efforts.

What other ways does the program provide value to dry cleaners?

DCERP was started because dry cleaners and their trade organizations requested that the program be developed. They realized ***without this program many financial transactions including business sales, property transfers and bank loans would not be approved because of the pollution liability associated with dry cleaning***. Because of DCERP, developers and investors are more likely to consider impacted dry cleaner facilities for re-development because of the limited liability and funding that the program provides. ***Through the Drycleaner Environmental Response Act (law) DCERP sites in good standing that are conducting environmental restoration activity have liability protection*** which means that impacted third parties (adjoining businesses or property owners impacted from a release at a dry cleaner) can't sue the dry cleaner for damages as long as the drycleaner is in the program. The liability protection also extends to other state regulatory programs which could order the responsible party (drycleaner owner/operator) to pay for the investigation and cleanup of the site. Because it is recognized that dry cleaner plant operation has a high potential to impact the environment the program requires compliance with Best Management Practices (BMPs) as a registration requirement. ***BMPs are procedures, methods, equipment and practices that are designed to reduce or prevent releases to the environment.*** DCERP BMPs pertain to compliance, waste management, solvent storage, release management, operator certification, system containment, floor sealing and solvent delivery. Although we recognize that there is a cost for BMPs implementation, there is a greater benefit through the reduction of potential environmental impacts. For the facility operator this represents a cost saving because you will use less solvent and your workforce will have a reduced potential for solvent exposure.

Not only does the program help clean up your property, DCERP provides liability protection.

What's going to happen?

If the program did not exist, impacted dry cleaner facilities would be subject to regulation under RCRA and CERCLA laws. If this occurred, the cost and liability for clean-up would be the responsibility of the dry cleaner and/or the property owner. These costs are substantial; site restoration and clean-up takes a long time, and environmental regulations are complex and difficult to understand. Please contact our staff or the Drycleaners Environmental Response Board with your suggestions and input to help make the program more successful. ***We also request that you complete and return the enclosed Fall 2011 Drycleaner Survey to DCERP.***

Contact Us

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Our Website:
http://www.tn.gov/environment/permits/dcerp.shtml

2012 DCERP Board Meeting Schedule

All Meetings are open to the public.

January 9
March 5
May 7
July 9
September 10
November 5

Quarterly Solvent Log Tips

Each year DCERP includes the Quarterly Solvent Purchasing Log in the annual Certificate of Registration packet. ***Dry cleaners are required to send this information back to DCERP at the end of each quarter.*** The solvent amounts reported by dry cleaners on the logs are compared to the amounts reported to DCERP by solvent suppliers/distributors to ensure that correct solvent surcharge fees are paid and submitted. This data is then used to calculate dry cleaners' annual registration fees.

The log is a one page form divided into the four quarters of the calendar year. Since DCERP staff deals with a large number of these reports, it is easier if all dry cleaners use the official form provided to them. Here are a few hints to make tracking and reporting your solvent purchases easier.

- √ Complete the entire top facility information portion including your facility ID#. This is your number assigned by DCERP and it is used to identify specific dry cleaner locations.
- √ Use the DCERP compliance calendar mailed with each year's Certificate of Registration. Each month has a small table to enter solvent purchases. If you use the calendar tables it is quick and easy to transfer the data from the calendar to the log form.
- √ Complete the entire line for each purchase. Date: Is when the solvent was purchased. Supplier: Who you bought the solvent from. Quantity: Report in gallons how much solvent was purchased. Solvent Type: Report if solvent was dense or light, if not sure enter the specific name of the solvent that was purchased.
- √ Fax (615) 741-1115 or mail the log to DCERP according to the quarterly reporting deadlines listed in bold type on the log form, even if there were no purchases made during the quarter. The dry cleaner operator should keep the original form and add each additional purchase on this one form. You may either fax or mail a copy of the original back to DCERP. When the log is sent in for the 4th quarter, the entire form should be filled in and completed.

If you have questions about the Solvent Purchasing Log contact Bill Ledford at (615) 741- 2281.

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