
EXECUTIVE SUMMARY

Transitioning a small business to new owners is often a difficult task. Where environmental contamination is likely to be present at the place of business, succession can be even more difficult. Not only might the business be difficult to sell, but the potential for contamination makes the real estate difficult to sell as well, even for another use. Where contamination is substantial, the cost of cleanup can potentially exceed the value of the business and the property, bankrupting the owner.

These conditions create a difficult situation for the owners of the business. Environmental contamination can force the original owner to keep the business operating simply to avoid incurring the cost of cleaning up the site. In the interim, contamination may worsen. In some situations, the owners simply flee. Abandoned and derelict former metal finishing companies can be found in most states and are prevalent in urban areas. They are left behind by owners who have been irresponsible or were simply insolvent. These sites are often community eyesores and subject to vandalism. Vacant buildings and chemical residues on buildings, machinery, or in soil, can pose threats to local residents. Subsurface contamination may affect groundwater.

Operating metal finishers who wish to transition their business to a new owner or to a new use are known as "Tier 3" firms. In an effort to develop more attractive options for owners of these businesses than abandoning the site, going bankrupt, or being forced to continue to operate, EPA has conducted three case studies of small metal finishing firms. The case studies evaluate how the owners chose to shut down, how the state and federal governments were involved with the sites, and how the process of transitioning a contaminated site can be improved. Bakersfield Chrome & Bumper (Bakersfield, CA) demonstrates the difficulty in determining responsibility for recently abandoned metal platers among the various regulatory agencies, especially when the property and company owners are different individuals. Advance Plating (Worcester, MA) is attempting to purchase a Tier 3 firm in Worcester, and is having a difficult time overcoming numerous regulatory and paperwork hurdles. Contract Plating (Stratford, CT) has been unable to complete a site closure because of a lack of funds and lingering compliance issues with the state. Themes that cut across the case studies were the need for improved information for site owners; better coordination and communication among regulatory agencies; the need for rapidly-developed site assessment information; and improved strategies for site transition where current owners have few financial resources.

CSI Metal Finishing's Environmentally Responsible Transition Workgroup has been formed, in part, to help develop a federal strategy to assist small businesses with environmental liabilities and financial constraints to sell, relocate or close their company in an environmentally responsible manner. The Workgroup is interested not only in developing new resources to support this mission, but in leveraging the expertise already gained by the private sector and existing government programs addressing contaminated sites such as Superfund, Brownfields, and state Urban Sites initiatives.

ACKNOWLEDGMENTS

CSI Metal Finishing's Environmentally Responsible Transition Workgroup

The Workgroup on Environmentally Responsible Transition was established by the Common Sense Initiative (CSI) Metal Finishing Subcommittee to address the liability and succession issues of Tier 3 firms. The Workgroup's goal is not to force lower tier metal finishers out of business, but rather to offer potential solutions to the dilemmas these Tier 3 firms face as they try to exit the market. It is important to note that a Tier 3 firm, by definition, wants to go out of business. By facilitating a responsible site transition, this Workgroup hopes to offer the small business owner alternatives to abandoning the site or being forced into bankruptcy.

WORKGROUP CORE PARTICIPANTS

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RECOMMENDATION

EPA and the States should make the *environmentally responsible transition* of Tier 3 metal finishing facilities a priority, including allocating resources (staff and funds) to facilitate these transitions. EPA should establish a “*Brownfields Prevention*” program for outdated metal finishing firms, ensuring site transitions to appropriate, community-sensitive new uses.

PROPOSED ACTION ITEMS

- ◆ **Regional Guidance Manuals for Responsible Transition.** EPA should produce, in conjunction with industry and local/state governments, *regional instructional documents or guidance manuals* explaining the process that should be used to responsibly close or sell a contaminated facility. A regional approach was chosen to reflect important differences in requirements or available resources across regions. The manual could contain information on the steps that need to be taken; the various government and community entities and assistance programs that should be involved; risks at particular stages; and opportunities for mitigating costs, sharing costs, and resolving common disagreements that often arise over who must pay for the cleanup. The manual should also include a detailed listing of, or references to, applicable remediation standards. While focused specifically on metal finishing firms, we anticipate many aspects of the approach would be applicable to other industries as well. The target audience for this manual is small business owners, as well as local regulatory and redevelopment agencies. The National Association of Metal Finishers, the American Electroplaters and Surface Finishers Society, the Metal Finishers Suppliers Association, and the *National Metal Finishing Resource Center* can help promote and distribute the guides.

- ◆ **Transferring Tier 3 firms to New Higher Tier Owners.** EPA and the States should assist high-tier metal finishers to purchase Tier 3 firms through *assistance in understanding and overcoming the environmental regulatory barriers to property transfer*. Assistance for the sale of Tier 3 metal finishers to top tier firms should be contingent upon their commitment to make the investments in the property and practices of the Tier 3 firm. This option preserves jobs and local taxes while preventing the abandonment of an industrial site.

- ◆ **Improved Access to Existing Redevelopment Resources.** EPA should encourage the states to expand the access of Tier 3 metal finishers to existing redevelopment programs and initiatives. This may include legislative action at the state level. Brownfields redevelopment grants could be targeted towards Tier 3 firms which are located in geographic localities with a high number of metal finishers.

- ◆ **Early Intervention.** EPA should encourage the Regions and States to identify potential Tier 3 metal finishers with a high likelihood for on-site contamination and work with them to achieve site transition or site improvement. EPA should apprise the Regions and States of the potential for Tier 3 firms to slip in to Tier 4 status, necessitating swift enforcement action to ensure public safety and environmental integrity. In this regard, additional contamination that occurs as a Tier 3 firm "hangs on" in the marketplace can be avoided. EPA should work with the states to develop strategies for local and state agency coordination in identifying Tier 3 firms.

- ◆ **Site Contamination and Risk Issues.** There are other, complex issues associated with the environmentally responsible transition of Tier 3 metal finishing facilities. These issues include the analytical basis for setting remediation standards for contaminated metal finishing sites and the legal, financial, and regulatory risks associated with the transfer of those properties. EPA and other stakeholders should address these issues in order to develop a comprehensive "exit strategy" for Tier 3 firms, as an essential part of the Agency's strategic approach to achieve industry-wide environmental compliance with environmental requirements.

CONTRACT PLATING, INCORPORATED

Stratford, CT

OVERVIEW AND BACKGROUND

The Contract Plating Company, Connecticut's oldest plating shop, closed its operations in 1995 after over 60 years in business. During its decades of operation in Stratford, the business provided metal finishing services to manufacturers including electroplating, anodizing, black oxidizing, phosphating, lacquering, painting, tumbling, etching, bright dripping, and degreasing processes. Contract Plating was a family-owned business; the President at the time of closure was the daughter of the owner. At its peak, the firm employed about 160 people.

During the 1990s, Contract Plating faced an uphill battle to survive due to a highly competitive market, significant environmental challenges, litigation from the State, and financing difficulties. In 1993 and 1994, the firm pursued loans from a private bank (secured with accounts receivable) and a low interest loan from the state of Connecticut's Development Authority to finance environmental upgrades. Contract Plating succeeded in tentatively obtaining a \$100,000 loan from the Connecticut Development Authority, but the loan would only be available when litigation between Contract Plating and the State ended.

Although Contract Plating knew it would receive no financing from working with the Common Sense Initiative (CSI), the firm had hoped that CSI would improve its credibility with lenders. When Contract Plating failed to obtain immediate financing from private banks or the State, pressure increased to cease operations. It is not known whether the loans, had they come through, would have been sufficient to allow the plant to continue operations.

Past operations and the land disposal of metal finishing wastes for a period of years have led to soil and groundwater contamination at the site, although the extent of this contamination is not known. Buildings on the site are old, in disrepair, and may need to be fully or partially demolished before redevelopment can proceed. Since its closure, the facility has been partially decommissioned, although there were insufficient private funds to completely close the site. The State of Connecticut is holding in escrow a post-closure trust fund of approximately \$95,000. Additional environmental remediation work was completed in an emergency clean-up operation by the State of Connecticut at the end of 1995. The State's litigation against Contract Plating, due to environmental violations at the site, was resolved in April 1996. While this settlement reduces some of the uncertainty that a prospective purchaser faces, substantial uncertainty remains in that the extent of subsurface contamination and the cost for remediation has not yet been quantified.

Although proximate to a major Superfund site, the Contract Plating property has a reasonably high potential of being redeveloped. The site is just off of Interstate 95 and has potential rail access. In addition, the Superfund site is being redeveloped into retailing space. Several real estate investment firms have visited the Contract site and are evaluating potential redevelopment options, although the viability of such a deal is not yet apparent. Issues that remain to be resolved include improving the estimate of remediation costs and developing an economically-viable reuse plan.

Some important lessons from the Contract Plating case study regarding the transition of a Tier 3 firm include:

- Environmental contamination does not preclude private sector redevelopment.
- Better coordination between government entities is necessary to prevent working at cross-purposes.
- Litigation adds an additional layer of uncertainty to transitioning a contaminated site to new uses.
- Goals of CSI and enforcement do not always mesh, and projects must be structured carefully to avoid conflicts.
- Loans to help firms continue operations and finance cleanups may become more common.

This case study provides a brief overview of the history of the site, the current conditions of property, and efforts made to transition the property to a new owner for similar or new use.

SITE HISTORY

The Contract Plating site has been used for a variety of metal finishing operations for nearly sixty years. Prior to that, this site was used for manufacturing, and, for a period of time, housed P.T. Barnum's elephants.

The 10.5 acre site includes two process buildings, four other structures, and two former lagoons. These lagoons are the result of pre-1970's disposal of metal finishing wastes when the apparent state desire was for on-site disposal of wastes instead of down-stream flushing. Electroplating occurred in the larger of the two buildings and also included alkaline cleaning, pickling, bright dipping, vapor degreasing, and other related processes. Anodizing, including aluminum etching, bright dipping, chromating, and dry sealing, occurred in the smaller building. Materials of environmental concern included many metals, cyanide, and solvents.

The plating metals used in the electroplating operations at Contract Plating included cadmium, chromium, copper, nickel, zinc, brass, and tin. The anodizing operation used sulfuric acid. Hazardous and non-hazardous wastes were generated from some of the operations. They were typically water solutions, both concentrated and dilute, containing metals, acids, and alkalides. Spent solvents were also generated. Treatment of wastewaters produced sludge containing various heavy metals and suspended solids, which are classified as F006 (metal hydroxide sludges) RCRA hazardous waste.

Soil and groundwater have been contaminated with metals and other constituents. However, it is likely that most of the property contamination was caused by the land disposal of metal finishing wastes between the 1930s and 1984.¹

In addition to Contract Plating's own operations, the site has likely been impacted by the migration of pollutants from nearby properties. The clearest example of this is the Raymark Company, an adjacent manufacturer of asbestos-lined brakes. Asbestos-contaminated fill materials have likely added some contamination to the Contract Plating site. Another adjacent property, the Daley Construction site, was previously the Raybestos softball field and has been contaminated by the use of asbestos-containing fill.

Environmental Condition of the Site

The Contract Plating site has both soil and groundwater contamination. This condition persists, despite spending more than \$1,000,000 to clean-up of portions of the property since 1985. Spending on environmental compliance and waste management averaged 13 percent of sales between 1984 and 1994, but has been insufficient to prevent a number of compliance problems. The condition of the grounds, groundwater, and buildings is summarized below. It should be noted that, like all Tier 3 firms, as the property, building, and equipment became older and more outdated, it became increasingly more difficult and more expensive to make environmental investments and to compete economically.

¹ Wastes were disposed of in lagoons beginning in the 1930s. Since they existed before RCRA, they have received very little regulatory oversight. During the 1970s, RCRA-regulated surface impoundments were used. These units received substantially more characterization and oversight than the lagoons.

Condition of Grounds

Sludge and soil sampling conducted during a RCRA facility assessment in 1987 confirmed the presence of high concentrations of cyanide, metals, and volatile organic compounds. The analytical results for cyanide ranged from 400 parts per million (ppm) in an area of possible lagoon overflow to a high of 27,000 ppm taken from a sample from the bottom of one of the lagoons (Weston, p.2).

Closure activity for the four RCRA-regulated drying impoundments and the storage pit were initiated in September 1987. In August 1988, as part of closure operations, approximately 760 tons of sludge and contaminated soil were removed and shipped to a disposal facility. The closure was completed in November 1990.

Since 1985, Contract Plating contributed to a closure and post-closure trust fund in accordance with RCRA financial assurance requirements. The Connecticut DEP is currently holding in escrow approximately \$95,000 for the purposes of on-going monitoring of the RCRA-regulated units.

The two pre-RCRA lagoons and the trench leading to the lagoons were not addressed by the closure, although they may contribute to the contamination emanating from the property. The volume of sludge remaining in the lagoons is estimated at a total of over 11,000 cubic yards (DEP, p.3). The lagoons contain no free water and the sludge has the consistency of molding clay. The trench has been covered with on-site soil. In addition, there is a possibility of some asbestos-laden soils or sludge on site from the nearby Raymark facility, although this has not been confirmed. There are no known air emissions from the site.

Condition of Groundwater

Monitoring of groundwater at the site was initiated in 1983. It was determined that the groundwater was degraded and contained high concentrations of several metals, cyanide, and organic solvents. The constituents that exceeded Drinking Water Standards included cadmium, chromium, cyanide, nickel, pH, trichloroethylene (TCE), chloride, zinc, and several halogenated volatile organic compounds (DEP, p.9). The distribution of the contaminants in the groundwater allows the conclusion that the former sludge drying beds and storage pit, now closed, are the contributing sources of inorganic and organic contaminants to groundwater at the site (DEP, p.11). Some additional contamination may also have been contributed by the Raymark site. There is no current use of the groundwater from the site.

Condition of Buildings

The Contract Plating facility includes a total of six structures: the Main Building, the Wastewater Treatment System Building, the Sludge/Filter Press Building, the Chemical Storage Building, the Anodizing Building, and the Hazardous Waste Storage Building. Following the close of business, valuable materials were sold, and, to the extent resources allowed, the buildings and process equipment were partially decommissioned. However, numerous plating chemicals and wastes remained on site.

Because of the presence of chemicals and the possibility of a roof collapse, the Connecticut DEP authorized an emergency removal of remaining chemicals and decontamination of much of the equipment.² The emergency removal and disassembly of the plating lines was undertaken during November and December of 1995 by a contractor hired by the State of Connecticut. The total cost to the state was approximately \$125,000. Although some plating equipment remains in the buildings, the DEP believes that the site has been stabilized. The roof remains unsound, with leaks, although the condition of the building walls is relatively stable. The buildings have been secured to inhibit unauthorized entry.

EFFORTS TO KEEP CONTRACT PLATING OPERATING

When Contract Plating President Veronica Peters inherited the company from her father, her intention had been to keep it operating. Part of this process involved making needed environmental upgrades to the site, as well as operational improvements. Some improvements were made, such as berming to contain any runoff or spills, using the firm's working capital. However, this source of funds was not large enough to finance all the needed improvements, and other sources of funding were not available.

Upon taking over operation of the company, Ms. Peters met with government officials at the local and state levels on numerous occasions. Requests for information and guidance, as well as attempts to get funding for site improvements, were, in her opinion, met with conflicting or inaccurate information or received no response at all. While there is disagreement over the degree to which these claims apply, it is clear that there was not a well-marked trail for a business owner such as Ms. Peters to obtain direction and information, and it is clear that in some circumstances, different government entities were working at cross-purposes. Not only did these problems make it more difficult for a small business owner to keep operating, but they made it more difficult to close

² Wastes on site included dry sludges and plating solutions. Some of these solutions were the result of rainwater intrusion through the severely degraded roof. Others appeared to be left over from plating operations. Numerous tanks were in various phases of deterioration.

down in a rational and responsible manner as well. Rather than trying to allocate blame for this particular situation, CSI can help lay the groundwork for how these different entities can work together in a more effective manner on other sites in the future.

COMPLIANCE HISTORY

Contract Plating has a fairly long history of compliance problems. Although the firm obtained and maintained applicable permits required of a metal finisher in Connecticut, compliance with the conditions of these permits and other state and federal regulations was often difficult. Since 1983, numerous Notices of Violation were issued by the DEP to Contract Plating for failing to comply with wastewater discharge permit standards, resulting in the payment of over \$8,000 in fines and other compliance costs. Following closure of its surface impoundments in 1990, the company did not fully implement its post-closure requirements, including accurately conducting a ground water monitoring program, and properly funding a post-closure care trust fund. Violations resulted in payment of a \$20,000 fine. In 1993, a DEP inspection found numerous violations of hazardous waste management requirements, eventually resulting in a referral to the Connecticut Attorney General for enforcement action.

The settlement with the State of Connecticut in April 1996 brought an end the contentious litigation-associated uncertainty regarding the Contract Plating site. Given the limited financial resources of the firm's owners, the settlement uses contingent payments as a way to ensure that in the event of a windfall from the sale and redevelopment of the site, the State would realize significant reimbursement. Conditions include:

- Immediate payment of \$50,000 cash penalty.
- First \$50,000 in net proceeds from the sale of the property (sale price less costs of sale, remediation costs, liens, and back taxes) to purchase hazardous waste response and safety equipment for the Stratford, Connecticut fire department.
- Repayment of emergency removal costs (\$125,332 plus interest if not paid immediately) to the state of Connecticut.

REDEVELOPMENT POTENTIAL

Due to its proximity to Interstate 95 and to rail lines, the Contract Plating site may be attractive for redevelopers. Development of the nearby Raymark site (contaminated with asbestos) into a retail shopping center makes the Contract Plating site more attractive for redevelopment, as environmental problems in the Raymark site are mitigated.

Several redevelopers have surveyed the site and reviewed available documents describing known contamination at the site and have met with the town's economic development coordinator. Based on the limited information available, these redevelopers were able to hypothesize what types of land uses were most likely given the physical characteristics of the site.

- **Retail Potential.** While the proximity to highway traffic and a large mall development originally made the site appear promising for additional retail, this is no longer considered a preferred option. Since the other retail sites had much better access to the highway, the Contract Plating site would be relegated to second-tier retail space, probably not valuable enough to justify redevelopment.
- **Distribution Center.** The proximity of the site to a potential spur rail line makes it one of the largest sites in the region with this type of access. By consolidating the Contract Plating site with the Daley Construction site, redevelopers thought this use was more attractive than retail.
- **Entertainment Center.** Use of the site for recreational purposes, such as a driving range, flea market, or mini-golf were other possibilities.

Potential Barriers to Redevelopment

While progress is being made in transitioning the site, a number of barriers remain to successful redevelopment. Foremost here is the uncertain extent of contamination and the cost of remediation. The higher the cost of remediation turns out to be, the more difficult the property will be to transition to alternative uses. Redevelopment potential is also influenced by the course of redevelopment at the adjacent Raymark site. Successful redevelopment of the area into retail space will boost the value of the Contract Plating property both through the mitigation of nearby environmental hazards and through the increased commercial potential from increased traffic flow. Finally, liens on the existing property from the state, the town, Contract Plating's law firm and others, total about \$400,000. These could also impede transfer and redevelopment of the site.

Site Value Versus Remediation Costs

A central issue with transitioning contaminated sites to new uses is whether their value to redevelopers (based on the next use) exceeds the expected cost of remediation. Where this is the case, site transition can generally go forward without public subsidy. Since the next use of the Contract Plating site has not yet been determined, and since the cost of remediation is still very uncertain, it is difficult to determine the prospects for this particular site. However, using the value

of similar sites as a crude estimator for Contract Plating suggests that there is a reasonable likelihood that the value of the site to redevelopers will exceed the cost of remediation, assuming that groundwater remediation is not required.

There are numerous factors that must be considered when appraising the value of land (e.g., location, accessibility, utilities). However, most of these variables can be controlled for by comparing neighboring sites that have similar characteristics. The Contract Plating Company is adjacent to the 34-acre Raymark Industries Superfund site. As soon as remediation of the Raymark site is completed, a Rhode Island developer plans to build a shopping center on the land. The developer is purchasing the 34-acre site for \$12 million. This price translates to approximately \$350,000 per acre. The purchase price includes facility closing costs and contributions toward the EPA clean-up. If the EPA remediation effort experiences cost overruns, the developer is not responsible for contributing any additional funds towards the clean-up.

Assuming that the Contract Plating site would have a value similar to that of the Raymark site, the 10.5 acres of Contract Plating land could be worth \$3.7 million after remediation. This estimate is probably conservative because development of the Raymark site will raise the value of surrounding land, including the Contract Plating site. This value would probably be sufficient to finance building decommissioning and soil removal, though it may not be sufficient if groundwater remediation is also required.

While the economics may work out, it is the impression of the site's owner that there have been no serious consideration of the property for redevelopment thus far. She has characterized the visits from potential redevelopers as "sightseers," suggesting that the economics do not highly favor redevelopment. The uncertainty regarding the extent of contamination and the wide range of potential remediation costs probably explains this lack of rapid action.

LESSONS LEARNED

- **Contamination does not preclude private sector redevelopment.** For sites, such as Contract Plating, where the site value if clean could well exceed the cost of remediation, redevelopment can often occur without government subsidy. The government role should be to help reduce the uncertainty for redevelopers:
 - Facilitate communication between current owners and potential redevelopers.
 - Define the required cleanup levels, such as whether treating groundwater will be required by Contract Plating's redevelopers.
 - Work to pre-approve permits for the redeveloped use, so developers can better estimate the next use value.

- Help to clarify the scope of existing contamination, liens on the property, back taxes, and ongoing litigation, so that developers can better estimate redevelopment costs.
- **Better coordination between government entities is necessary.** Contract Plating was involved with local and state economic development offices, state and federal environmental agencies, and the state attorney general's office. These entities did not coordinate well with each other, and sometimes worked at cross-purposes. This was extremely frustrating for a number of stakeholders who felt it slowed the process of site remediation and transition considerably.
 - **Litigation adds an additional layer of uncertainty to transitioning a contaminated site to new uses; alternative dispute resolution methods that enable market transactions to occur should be used.** Where financial resources do not exist inside the firm, but the site may be valuable in a new use, implementation of contingent payments and liens within a settlement agreement may help resolve litigation more quickly while at the same time ensuring an adequate environmental penalty.
 - **Goals of CSI and enforcement do not always mesh.** CSI, working to increase flexibility for firms to transition out of business, can conflict with enforcement efforts to make polluters pay for past violations. Choosing sites that do not have such conflicts is important in the early stages of CSI. While efforts were made early-on to discuss CSI involvement with the site with state enforcement people, there was some disagreement later among the parties regarding what had been decided. If CSI does get involved with parties in litigation in the future, the Contract Plating experience suggests that a more formal Memorandum of Understanding may be needed.
 - **Loans to help firms continue operations and finance cleanups may become more common.** According to Stratford's Economic Development Coordinator, when Contract Plating sought economic development loans to finance site remediation, the Connecticut Development Authority's policy was to not give loans to firms with environmental problems. This mindset has changed over the last couple of years due to the increasing number of Connecticut brownfields. If the Authority believes their loans will help the firm keep operating and come into compliance, they will now at least consider loan funds.

REFERENCES

- Casey, James. Stratford Development Company, personal communication, November 20, 1995.
- Contract Plating Company, Inc., ledger accounts for the years 1984-1994.
- Connecticut Department of Environmental Protection Memorandum, G. Shteynberg, March 11, 1993.
- Connecticut Department of Environmental Protection, Motion for Judgment Upon Stipulation, Timothy Keeney, Commissioner of Environmental Protection v. Contract Plating Company and Veronica Peters, Superior Court, Judicial District of Hartford/New Britain at Hartford, April 3, 1996.
- DeWitt, James. GZA GeoEnvironmental, Inc., personal communications, October and November 1995.
- Duby, Christopher. Reporter, *Fairfield County Business Journal*, personal communication, November 30, 1995.
- Duby, Christopher. "EPA Hastens to Clean up Raymark Superfund Site," *Fairfield County Business Journal*, October 23, 1995, page 12.
- GZA GeoEnvironmental, Inc. *Generator Closure Plan, Contract Plating Company, Inc.*, September 1995.
- HRP Associates, Inc. *Post Closure Report, Part B*.
- Massicotte, Kim. Assistant Attorney General, State of Connecticut, personal communication, June 24, 1996.
- Nelson, Pete. Dry Dock Realtors, personal communication, November 20, 1995.
- Peters, Veronica. President, Contract Plating Company, Inc. Personal communications, October and November 1995.
- Roy F. Weston, Inc. *Removal Program Preliminary Assessment/Site Investigation for Contract Plating, Inc. Stratford, Connecticut*, November 1994.
- The Scientific Consulting Group, Inc., *Emissions From Metal Finishing Operations: Draft Report*, March 1995.

REFERENCES

(continued)

Society of Industrial and Office Realtors. "Stratford, CT," *Comparative Statistics of Industrial & Office Real Estate Markets*, 1994.

Stratford Environmental Update, Vol. 1, No. 2-6, August 1993-February 1995.

Toolan, Diane. Director of Community and Economic Development, Town of Stratford, CT, personal communication, June 26, 1996.

U.S. Environmental Protection Agency. "Demonstration Pilot Project Work Plan Guidance Document," September 1995.

U.S. Environmental Protection Agency Region I Memorandum, D. Girten, February 6, 1995.

Valenti, David. Tax Assessors Office, Stratford, CT, personal communication, November 20, 1995.

Waste Reduction Institute for Training and Applications Research (WRITAR), "Profile of the Metal Finishing Industry: Draft Report," February 1995.

Wertam, John E., Connecticut Environmental Law Handbook, Third Edition, 1992.

ADVANCE AND RELIABLE PLATING

Worcester, MA

OVERVIEW AND BACKGROUND

In summer 1996, Advance Plating Company of Worcester, Massachusetts was trying to purchase Reliable Plating, another Worcester metal plater about half its size. Although both the buyer and seller appeared motivated to conclude a deal, various constraints related to potential environmental contamination arising from past activities in the plant and on adjacent land were hindering progress. Both parties were concerned about the nature and extent of their liability exposure, the uncertainty over the degree of clean-up required, and the likely cost of remediation. Although several new public and private initiatives were available to help deal with these obstacles, the complexity of these programs and the resources needed by a business owner to fully understand and be able to use them effectively somewhat diminished their potential value to facilitate the transaction.

Advance Plating was founded in 1957 by Steve Jorjorian, Sr. His sons later joined him in the business. Advance Plating operated as a job shop and provided almost all types of plating. Environmental regulations led to its eventual specialization into nickel and chrome plating. Reliable Plating is one of a handful of remaining family-owned platers in the Worcester area. Founded at a similar time as Advance Plating, the children of Reliable's founder have decided that they do not want to continue operating the company after their father's retirement.

There is very little information on the environmental conditions of the Reliable site. Contamination, however, is likely. In addition to forty years of plating operations at the site, the land was previously used as a city dump and landfill. Adjacent properties, such as a foundry and a scrap metal yard are other sources of potential contamination.

SITE AND COMPANY HISTORY

Advance Plating

Advance Plating was founded in 1957 by Steve Jorjorian Sr., who wanted to go out on his own after learning the plating business while working for a relative. Together with a partner twenty years his senior, Jorjorian purchased the rights to use an underutilized plating room that was part of a manufacturing plant located in the center of Worcester. Jorjorian's son, Steve Jr., started working for the company in 1972, at the time of the older partner's retirement. A second son joined his father and brother a few years later. In 1979, Advance Plating purchased the building which it currently occupies. With more space than it needed for current business, Advance expanded by creating a

separate company, Hi-Tech Gold, with a new partner who had experience in precious metal plating. Hi-Tech rode the boom in gold and silver plating of components for personal computers and electronics.

Like most job shop platers, Advance originally did a bit of almost every type of plating, including nickel, chrome, cadmium, anodizing, passivating and zinc, as well as finishing operations, such as polishing, tumbling, and buffing. The costs associated with complying with increasingly stringent environmental regulations led many platers to reduce the number of chemistries with which they worked. Advance eventually concentrated on nickel and chrome operations, and focused on high volume plating of small and medium size parts. Following boom years through much of the early and mid-1980s, the New England plating industry experienced difficult times from 1988 - 1992. The economic downturn, combined with the loss of regional manufacturers, caused Advance to lose forty-five percent of its chrome and nickel business. To remain competitive, Advance expanded the geographic range of its sales force to include all of New England, rather than just central Massachusetts as had previously been the case. The firm also installed an automated plating line, refurbishing and cleaning up much of the facility at the same time. In 1996, Advance was one of eight platers left in Worcester, out of more than twenty operating in the early 1970s.

Reliable Plating

Reliable Plating is one of the six remaining plating companies in Worcester that is still family owned. It was founded at about the same time as Advance, and the owner's son and daughter both joined their father during the late 1970s. According to Steve Jorjorian Jr., the poor industry conditions and consequent difficulties with the business in the early 1990's convinced the children that they did not want to continue running the company after their father retired. In addition to the personal reasons behind the children's desire to leave the business, Jorjorian opined that the second generation owners did not wish to put in the effort needed to grow to a size necessary to withstand the continuing pressures that were forcing plating companies to consolidate or fold.

Reliable Plating is located on the site of an old city dump and landfill in an industrial zone of Worcester. A foundry, now defunct, is located on the upgradient side of the site across a set of railroad tracks. A three-family home, out-of-context with the other uses of the area, occupies one adjacent lot and a scrap metal yard, in operation since the late 1800s, also abuts the property. No site assessment had as yet been conducted in relation to the possible disposition of the company. Potential sources of site contamination include:

- **Plating operations:** solvents and plating chemicals, especially from the early years prior to environmental regulation.
- **Railroad:** possible contaminants from trains (lubricants, etc.) and spilled cargo.

- **Foundry operations:** metals and other substances from the foundry that may have entered groundwater flowing under the site.
- **Scrap metal yard:** metals and coatings that may have leached into the groundwater.
- **Landfill dump:** unknown contaminants in the soil from the prior use of the site as a dump.

The plating shop itself is in working order, though some areas are in better condition than others. New floors had been constructed where an automated zinc plating line was installed several years ago. With some additional minor upgrading, Jorjorian felt fairly confident that the operation could be run in an environmentally-responsible manner.

EFFORTS TO KEEP THE BUSINESS OPERATING

While Reliable's current owners have not been making much effort to rejuvenate the business, the potential purchaser is hoping not only to keep it operating, but to expand it as well. Steve Jorjorian was enthusiastic about the acquisition of Reliable Plating because of the synergies he saw available from combining the two businesses. For many years he had been sending some of his own customers to Reliable for services he did not provide, principally zinc plating. In addition, his two salespeople often reported inquiries about zinc and the other types of plating Reliable performed. Thus Jorjorian would not only acquire Reliable's customers, but he was confident that he would be able to expand the customer base quickly. Additionally, he saw ways to make the Reliable operations more efficient, based on improvements he had made in his own business.

From the perspective of the local government, the acquisition was also attractive. Instead of being removed from the active tax rolls if the business were shut down, the Reliable-based operations would likely grow as the combined operations increased their customer base and volume of business. Jorjorian thought that employment at the plant would at least remain stable, and perhaps even increase. In addition to the economic gain from the jobs at Advance/Reliable itself, the retention of the plating facility was a critical piece of a larger economic development effort in Worcester: an attempt to attract manufacturing firms back into the city, for which strong service industries, such as metal plating to support the manufacturers, was an integral component.

Jorjorian had held preliminary discussions with the owners about buying Reliable, but, as of June 1996, those discussions had not yet reached a serious negotiating stage. Complicating the picture was the existence of several other interested parties who had offered to purchase the assets of the business but not the land. Although the offers had been for cash, they had been rejected because the current owners did not want to retain the property and its liabilities. They wanted to transfer all liability for contamination from past activities to the buyer.

From Steve Jorjorian's perspective, several issues constrained his ability and willingness to move forward:

- **Liability Risk:** assurance that once the property was remediated to an agreed condition, Jorjorian could not be held liable for contamination discovered in the future that resulted from activities or events that occurred prior to his ownership.
- **Remediation Standards:** clear definition of a clean up standard that was appropriate for the site based on its on-going and intended future use.
- **Remediation Costs:** a degree of confidence that clean-up costs would not exceed a known limit.
- **Financial Support:** public financial support for remediation costs, such as municipal tax credits, that could be assured prior to negotiating a deal with the seller.
- **Paperwork Relief:** reduced paperwork or facilitation of paperwork for various programs; current amount of paperwork was an obstacle to moving forward.

EFFORTS TO ENCOURAGE REMEDIATION AND REDEVELOPMENT

A variety of public and private efforts have recently been initiated that address some of the concerns raised by Jorjorian. Given the early stages of many of these efforts, their applicability to the purchase of Reliable Plating was uncertain. However, state and federal officials have worked hard to address many of the barriers noted above. While future sites could not count on this level of government support, the officials hoped that the lessons learned by facilitating this transaction would make similar deals in the future easier to achieve.

Assessing Site Contamination

A central concern with any property purchase is the level of contamination at the site being purchased. Since remediation costs rise with contamination levels, an accurate assessment of the property is the most important component in evaluating whether the site purchase makes sense or not. To assist in this regard, EPA New England has attempted to find funding for a Phase 1 site assessment (required under the state's Superfund law (21E) for transfer of commercial or industrial real estate), and has investigated other public and private sources of funding to conduct the study, although they have not yet been successful.

Remediation Standards

To provide a bit more certainty regarding how much existing site contamination would need to be cleaned, EPA issued a "comfort" letter in May 1996 stating that Reliable Plating was not on the CERCLIS data base and that, therefore, the U.S. EPA had no interest in the site as a potential federal Superfund site.

On the state level, several Massachusetts programs were in place that could directly help to resolve some of the concerns Jorjorian faced. Under the revamped 1993 Massachusetts Contingency Plan, the degree of remediation for a commercial/industrial site could be linked to its future activities, codified by a deed restriction on the property. Known as the "Clean Sites Initiative," this was a pilot program intended to limit the liability of the purchaser of a contaminated site through a Covenant Not To Sue. In exchange for satisfactorily achieving the agreed clean-up standard, the purchaser would be relieved of further liability for past contamination.

A number of new environmental insurance products are also available to protect the purchaser from contamination not discovered during site assessments, as well as from changes in the government's interpretation of past agreements on how clean the site needed to be. It is not clear whether such a policy could be written for the Reliable site, or whether it would be a cost-effective solution.

Information Provision

To navigate the complex process of trying to integrate the many governmental agencies and programs involved with contaminated sites and industrial redevelopment, EPA New England has worked with Mr. Jorjorian to provide information on the available programs that could facilitate the purchase of Advance Plating.

Financial Support

A number of potential resources exist to help Mr. Jorjorian to purchase the property. Aimed at retaining or creating jobs, these programs also help prevent contaminated sites from being abandoned. One example of such a program is the Economic Development Incentive Program, run by the State of Massachusetts, which provides economic incentives for businesses creating new jobs in economic target areas (which include Worcester). Among the potential benefits of this program is a 5% state investment tax credit, priority for state capital funding, and municipal tax benefits. EPA officials envisioned that this program could be combined with a Covenant Not to Sue as an attractive inducement to purchase the site. Although there remained questions of the eligibility of the Reliable acquisition for these programs, the two instruments combined seemed to offer potential answers to issues that were hindering the projects advancement. EPA staff also initiated a meeting between Jorjorian and the Worcester City Managers Office of Planning and Community Development to introduce him to other potential municipal assistance opportunities. Jorjorian has not fully investigated these programs due to time constraints and a desire to be sure that the existing offers on the site did not go through before investing resources in trying to buy the property .

In addition to governmental resources to address the environmental liabilities, there may be some resources available from the owners of Reliable Plating. There has, as of yet, been no assessment made of potential resources that the current owners could contribute towards cleaning up the environmental problems associated with their years of operations; however, once completed, this could help reduce Mr. Jorjorian's financial exposure from the site as well. Given the absence of data on site contamination, EPA New England was not able to estimate the level of financial support from outside sources (such as government) that would be necessary to induce Mr. Jorjorian to assume responsibility for the property.

Protection from Cost Overruns

While a site assessment and pre-negotiated cleanup standards both help a redeveloper to estimate the cost of the clean-up and whether redevelopment makes economic sense, there is always a risk that the cost of remediation will be larger than what was estimated. A large cost overrun could drive a redeveloper into bankruptcy. As a result, Mr. Jorjorian was interested in finding a way to protect himself from such an occurrence.

One possible solution is a new type of environmental insurance policy, called a "stop loss" policy, that reduces the risks of cost overruns by limiting the redeveloper's responsibility for them. While project specifics and the cost of the insurance (typically from 10 -20% of the projected cost of the clean- up) might make this insurance unsuitable for this situation, it was an additional element that could reduce Jorjorian's concerns in making the acquisition.

LESSONS LEARNED

Despite a willing buyer, a willing seller, and much government help, the transfer of ownership of both the business and its associated liabilities has been difficult to do. As a result, preventing site abandonment becomes more and more difficult the more time that passes. While the incomplete status of the acquisition makes it premature to comment on the effectiveness of the various programs in aiding this transaction, the situation offers lessons about the challenges of buying/selling a Tier 3 metal finisher and suggests additional initiatives that could help facilitate such sales.

- **Metal Finishers Don't Always Know About Existing Government Programs.** In this case, Steve Jorjorian had little idea about the many government programs that could help him to purchase the Reliable Plating site. Compiling and disseminating better information on Brownfields and development initiatives available to buyers and sellers could help remove this barrier. This would best be done through a pamphlet that would describe how these programs can be used to facilitate a transaction, supported by a case study that used these programs effectively. An appendix could list sources of further information, but details of actual state programs that are new or being piloted should be kept to a minimum to avoid quick obsolescence of the guide. EPA Region 1 is planning to develop such a document, which would focus on New England state programs, and which would include a summary of the Advance/Reliable case study when the transaction is further along.
- **Existing Government Programs Are Sometimes Fragmented and Time Consuming.** Even when a metal finisher is aware of the programs, the benefits may be elusive. The benefits from any one program may be too small to warrant the effort to understand program requirements, fill out an application form, and complete the required paperwork. Especially for small businesspeople, the time investment these government initiatives require can be a substantial burden on normal day-to-day business operations. Efforts to consolidate the various programs, to reduce the burden on the end-user (such as Mr. Jorjorian) could be useful.³ EPA could also work with the Small Business Administration to reduce the paperwork burden associated with applying for these resources.

³ Some attempts have been made at this type of consolidation. For example, "Brownfield bonds" combine resources from Brownfields programs and redevelopment efforts into a single financial instrument available to the redeveloper. Many of these efforts are privately-run; EPA might benefit from trying to use them to reduce the administrative burden on small businesses.

- **Phase 1 Site Assessments are a Critical First Step in Site Transition.** Where a company is small and does not have the financial resources to pay for a site assessment, the site transition process may simply stop. EPA may want to provide seed money for assessments in these cases as a way to help the process move forward. The cost of this assessment could be added as a lien to the property sale so that the government gets paid back if the property turns out to be valuable.
- **Refocus Policy Emphasis from Brownfield remediation to Brownfield Prevention.** In regions of the country such as New England where the plating industry is older and has been through economic downturns, a large percentage of the Region's removal program resources are spent on cleaning up old plating shops. Refocusing on ways to prevent older shops from being abandoned may be less expensive than the current approach. Redevelopment and retention of jobs is equally important.

BAKERSFIELD CHROME & BUMPER

Bakersfield, CA

OVERVIEW AND BACKGROUND

Bakersfield Chrome and Bumper (BC&B) is a former Chromium plating shop in Bakersfield, California. BC&B demonstrates the complicated nature of addressing environmental concerns at a site where the business and property owners are different individuals and unwilling to participate in the environmentally-responsible transition of the site. The case also demonstrates the importance of, and the dire consequences resulting from, a lack of clear lines of responsibility for different municipal authorities with overlapping or unclear jurisdiction for an abandoned site. From the perspective of a small business owner, the complicated nature of the regulations and the uncertain outcome of any involvement with EPA have created a large hurdle to timely and effective site cleanup and transition. This may well serve to drive potentially law abiding small businesses from a Tier 3 status to a Tier 4 status. However, the case also demonstrates that true renegade firms do not fear enforcement because when is no clear enforcement procedure in place.

Simon J. Molino, the owner of Bakersfield Chrome & Bumper, was a successful bumper recycler from the Los Angeles area and decided to expand into the Bakersfield market. Mr. Molino began his business by leasing the building and property at 231 Sumner from the property's owner, Mr. Howard Rubin. As his business improved, Mr. Molino purchased the property from the Mr. Rubin outright. In the late 1980s, the declining business in bumper recycling, coupled with increased environmental regulations in California, forced Mr. Molino to return ownership of the property (not the business) to Mr. Rubin. Mr. Rubin allowed Mr. Molino to lease the property and continue to operate the facility. Sometime in the early 1990's, Bakersfield Chrome & Bumper went out of business. Mr. Molino removed all assets from the property and left Mr. Rubin with the liability of the plating solutions, chemicals, and potential site contamination. Mr. Molino is believed have operated at least one other plating company in addition to his Bakersfield facility.

The Bakersfield site has remained dormant for the past few years. Recently, the property owner tried unsuccessfully to sell the property in "as is" condition. Despite the presence of hazardous plating solutions on the premises, the municipal authorities have not taken decisive action against either the firm's owner or the property owner. Municipal authorities have taken court action in an attempt to make Mr. Molino act responsibly, but to date Mr. Molino has yet to respond. His whereabouts are unknown.

The property owner has strongly resisted taking responsibility for the site and still believes that the property could be sold "as is." This unwillingness to clean the site was apparent when Mr. Rubin refused an offer from Kisco Sales, an adjacent property owner, to buy the BC&B site if cleaned. Mr. Rubin does not feel any responsibility for paying for a phase 1 site assessment and

assessing the cleanup costs. An offer was made by a local environmental firm to perform a modified phase 1 on a contingency basis. This offer was relayed to Mr. Rubin by his real estate agent at Garone Real Estate. According to the agent, his calls to Mr. Rubin were not returned.

SITE HISTORY

Bakersfield Chrome & Bumper is located in an area considered light manufacturing and commercial, with sporadic residential dwellings. The plating facility is surrounded by a bottling company, a plastic tank wholesale outlet, a pool service company, a railroad track, and one residence. The building is constructed of steel on a cement foundation and the entire property is asphalted and fenced. The building has been vandalized numerous times and the lock has had to be replaced when homeless people broke in to the building for shelter.

When BC&B went out of business, Mr. Molino removed all assets of value and left the plating tanks and chemicals behind. In the subsequent vandalism, all remaining items of value have been removed. The tanks and berms are still intact and contain solutions, although corrosion from the chemicals will eventually ruin the integrity of the tanks and increase the possibility of a significant spill. The chemicals left in and around the plant have labels that are badly deteriorated or missing, creating the potential for another possible mishap in the future.

The environmental condition of the property itself is unknown since no soil or groundwater samples have been taken at this time. A visual inspection of the site suggests that contamination could be minimal because the entire facility is either cement or asphalt and no unusual discolorations exist on these surfaces. However, photographs from various inspections indicate poor housekeeping procedures and numerous cracks in retaining walls. Documentation from the Bakersfield Fire Department's Office of Environmental Services indicate that Mr. Molino had numerous violations and fines regarding the correct procedures for handling chemicals and waste. Only a phase 1 and phase 2 site assessment will determine if poor environmental management at the site has contaminated the ground and/or groundwater.

On June 8, 1993, a manifest from Mr. Molino indicates that 100 gallons of sodium cyanide were removed from the premises. It is unclear whether this was the entire amount of cyanide stored at the site since an earlier report indicated 5 drums of the material were on the premises. It is clear that many other potentially hazardous materials remain; drums containing unknown substances with decaying DOT hazardous materials labels continue to sit outside the BC&B building.

According to records from the City of Bakersfield's Public Works Department, Wastewater Division, BC&B had numerous problems with their reporting requirements, site inspections, and waste disposal. In 1992, the facility was considered to be in significant non-compliance with the Clean Water Act for failure to file its semi-annual report. Notes from each inspection indicate inconsistencies in disposal methods of hazardous wastes, including undocumented claims that wastes

were shipped for disposal, without manifests, to another facility owned by Mr. Molino. BC&B was warned numerous times about improper storage of hazardous materials and improper or inaccurate labeling of hazardous chemicals.

EFFORTS TO KEEP BUSINESS OPERATING

Unlike owners in some of the other case studies, Mr. Molino does not seem to have made much of an effort to keep his business operating. Perhaps his age (older) and the substantial capital needed to shift from a dying industry (bumper recycling) to one with more potential led him to give up. With very little promise of turning his business around, he elected to cannibalize the assets and leave the area. There is no evidence that Mr. Molino tried to work with local programs to keep his business operating or to shut down in a responsible manner. Chronic non-compliance with waste handling requirements and a willingness to abandon his business signify that Mr. Molino was a Tier 4 operator.

EFFORTS TO ENSURE RESPONSIBLE OPERATION AND SITE TRANSITION

Mr. Molino apparently abandoned the site without contacting any of the agencies about a correct procedure for closure. This left the controlling agencies with a dilemma, since they no longer had a business to oversee, although they did have potential environmental threats to evaluate and contain. While the hazardous materials section of the Fire Department ultimately sought action against Mr. Molino for his failure to supply a closure plan, better coordination among the various agencies would have made lines of command clearer, and response times quicker. According to a nearby plater, developing a system allowing platers to come forward without fear of substantial punishment would greatly reduce the incentive to flee, and would ensure that clean-up efforts are not unnecessarily complicated by the lack of information that arises when an owner does abandon a site.

Risk Management and Prevention Plan

In January of 1991, Simon Molino, owner of BC&B was asked to prepare a Risk Management and Prevention Program (RMPP) for the storage and use of hazardous materials. On January 28, 1992, Mr. Molino was issued a violation for failing to prepare this plan within one year. Over the course of the next six months, Mr. Molino made attempts to satisfy the disposal requirements of some of his hazardous chemicals and to prepare a satisfactory RMPP. His efforts were insufficient; in August of 1992, Mr. Molino was issued a violation for storing sodium cyanide in uncovered drums, without proper labeling, and for greater than 90 days. On November 23, 1992, another violation was issued because the sodium cyanide remained in five uncovered, 55-gallon drums. In April of 1993, Molino was served a citation for failure to implement an approved RMPP. On June 21, 1993, Mr. Molino pleaded guilty in a Bakersfield court and, upon agreeing to properly

dispose of all on-site hazardous wastes, was sentenced to three years probation and fined \$465.86 to reimburse the investigative, administrative, and legal fees associated with the Bakersfield Fire Department's repeated investigations and RMPP evaluations at BC&B.

Property Abandonment

Emphasis shifted from safe operations to proper closure/remediation once the property was abandoned. Ralph Huey, the Hazardous Materials Coordinator for the city of the Bakersfield Fire Department's Office of Environmental Services, believes the property has been abandoned for approximately two years. The Fire Department has repeatedly sent letters to Mr. Molino (at his factory address) about the condition of his business. Unfortunately, Mr. Molino has left Bakersfield and his current whereabouts are unknown. The letters from the Fire Department do not appear to ever have reached Molino.

Given the property abandonment, it is somewhat surprising that little action has been taken by the state or local government to assess and mitigate any imminent environmental hazards at the site. According to Mr. Huey, a major factor in the lack of action taken at this facility was the lack of communication between public agencies and an unclear designation of responsibility for this small, abandoned property. However, as of January 1997, California's Certified Unified Program Agency (CUPA) program will designate responsibility and authority to specific local agencies to deal with these types of situations. In the case of BC&B, the Bakersfield Department of Environmental Services will have jurisdiction over the site. Mr. Huey plans to initiate action at the property and with the property's legal owner when granted jurisdiction in January.

Identification of Responsible Parties

The Bakersfield Fire Department has recently begun to search for Mr. Rubin in relation to the environmental concerns of the site. A certified letter was sent to Mr. Rubin on May 14, 1996 requiring his assistance in determining the type and quantity of hazardous materials on his property. As of August 1996, there has been no reply. There does not appear to be any ongoing effort to find Mr. Molino.

Despite the environmental problems at BC&B, it is ironic that failure to pay property taxes may be the ultimate driver of action at the site. Routine tax bills go to the registered owner of the site, Howard Rubin, and are ignored. According to the city of Bakersfield, property taxes have not been paid on the property since 1993, resulting in an overdue bill of \$5,468. If taxes go unpaid for five years, the city will auction off the property.

REDEVELOPMENT POTENTIAL

Despite being abandoned and contaminated, the BC&B site has fairly good redevelopment potential.⁴ A realtor with Garone Real Estate estimates that the site has a value of approximately \$90,000 after a complete clean-up and that clean-up costs for the removal of tanks and solutions could possibly be done for half that value. Discovery of soil or subsurface contamination, although considered somewhat unlikely, would obviously alter this balance. In addition, if the site is left unattended, property contamination could increase, potentially driving up remediation and closure costs by a factor of three or more.

Redevelopment potential aside, there remains considerable uncertainty regarding the cost of remediation. This uncertainty makes bidding for the site much more risky for a redeveloper. To address this concern, the Environmentally Responsible Transition Workgroup sought to have a site assessment conducted. WZI Inc., a Bakersfield-based regulatory and environmental consulting firm specializing in development and compliance efforts, has been involved in a variety of projects promoting industry and government cooperative efforts. The firm offered to perform a modified Phase 1 Site Assessment (including moderate soil and water sampling) on a contingency basis. Thus, they would get paid only if the site was sold.

Despite this offer, the property owner, Mr. Rubin, has refused to grant permission. According to his real-estate agent, Mr. Rubin is not interested in any voluntary clean-up project but rather, will only consider selling the property "as is." It is unclear what type of information needs to be provided, or action taken, to get Mr. Rubin to take responsibility for the site.

LESSONS LEARNED

- **Fear of regulatory agencies is a motivating factor.** Perceptions of EPA's approach to non-NPL Superfund sites include a regulatory nightmare and an immense paperwork burden. These fears, coupled with the threat of long-term liability and extremely expensive cleanups, have led to a mistrust of the government as a positive force in accelerating site cleanup. When property owners become fearful of huge fines and possible jail time associated with the contamination of their property, and realize that the capital they need to clean up the site may drive them into bankruptcy, they flee. Developing a process that is quicker and easier for owners to participate in can help increase the likelihood that properties will be transitioned with the input and site-specific knowledge of the owners and managers. A faster process will

⁴ In fact, approximately 18 months ago, a nearby firm (Kisco Sales) wanted to expand their operations and purchase the site. However, they were interested in taking ownership of a clean site; Mr. Rubin, the current owner, wanted to sell the site "as is".

also ensure that renegade operators with criminal intent will be recognized more quickly by the existing judicial system and will be held accountable *before* they have the opportunity to flee.

- **Communication and coordination between local agencies is vital.** The greatest barriers to the *responsible transition* of this particular property are the attitudes of the site and firm owners and the apparent lack of communication between regulatory agencies. The case raised more questions about actions that weren't taken than about actions that were:
 - Why weren't any actions taken when the owner ceased paying taxes?
 - When the POTW stopped receiving discharges from BC&B, why didn't they alert California EPA's Department of Toxics and Substances Control, Kern County Environmental Health, or Bakersfield's Office of Environmental Service?
 - Why was the time allowed for the company to develop its Risk Management Plan so long, and the penalties so small when the deadlines weren't met?
 - EPA should encourage states and localities to perform aggressive inspections *as soon as regulators suspect the property may have been abandoned*. Between the POTW, tax assessor's office, and the Fire Department, someone should have known the situation of BC&B.
 - Current agencies with inspection authority such as POTW pretreatment inspectors, fire departments, or county health department inspectors, should be able to recognize plants that may be prone to abandonment. Some municipalities that have been adversely impacted by renegade metal platers have developed a pollution prevention inspection system that will allow experts to perform yearly inspections. One example of such a program is in Washenaw County, Michigan. These inspections can serve as early warning of imminent closure.

While California's CUPA will begin to remedy these issues by designating authority and responsibility to specific agencies in each municipality to address these concerns, informal communications between agencies earlier would have gone a long way towards avoiding this situation.

- **Regional Resource Guides.** EPA should encourage the states/regions to develop regional resource guides that would provide information to property owners and community development agencies regarding voluntary cleanup programs, sources of funding, and sources of technical assistance throughout the state and federal agencies. Members of the City of Bakersfield's

Redevelopment Agency and Office of Environmental Services have said that a listing of all local, State, and Federal resources (agencies, people, funds) that can be contacted for assistance in the remediation and redevelopment of small, recently abandoned (or about to be abandoned) properties would be of great assistance to them. Likewise, such a manual could be made available to job shop owners who want to act in an environmentally responsible manner, but lack the resources to do so.

- **Improved Information Sharing.** EPA should encourage communities and states to establish communication networks and protocols for identifying recently (or about to be) abandoned metal finishing facilities. There needs to be better coordination between the various state, local, and federal agencies to identify Tier 3 sites as early as possible. Local metal finishers may also be able to provide insights or information about Tier 3 firms in their area.
- **Options for Site Assessment.** EPA should establish a policy on Phase 1 investigations. These should be mandatory upon closure of a facility, especially if there is imminent hazard to the community from abandoned waste and vandalism. EPA should encourage the states to assist small operating metal finishers to determine on-site contamination (Phase 1 & 2 site assessments) without the threat of an imminent enforcement action.
- **Utilize Existing Treatment Equipment During Plant Closure/Remediation.** EPA should consider encouraging the states to utilize low-cost options for the disposal of on-site hazardous substances, when appropriate and where the environmental threat to the community is not increased. Options could include extending a facility's discharge permit to allow the on-site treatment and discharge of hazardous solutions, thus avoiding the extremely high cost of removal, incineration, and/or disposal.

REFERENCES

McBride, Robert. A.C. Plating, Bakersfield, CA, personal communications March 1996.

Huey, Ralph. Bakersfield Fire Department, Office of Environmental Services, personal communication, July - September 1996.

Bakersfield Fire Department, Office of Environmental Services, copies of inspection reports and court documents, 1985 - 1996.

Tanner, Alan. Garone Real Estate, Bakersfield, CA, personal communications March 1996.

City of Bakersfield, Public Works Department, Wastewater Division, inspection reports, permits, and compliance status reports, 1985 - 1996.