# Brownfields and Contaminated Sites Cleanup Policy in Contra Costa County

## Recommendations for Improvement

Contra Costa County Hazardous Materials Commission

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## Introduction

Contra Costa County's extensive industrial and commercial history has provided many benefits to the County, but it has come with costs as well. One of these costs is that many of these sites have been contaminated with toxic chemicals. Approximately 1300 sites in the County have been identified that have been, or could potentially be, contaminated with toxic chemicals. Approximately 485 of these sites are still currently identified as contaminated or potentially contaminated, and are in the process of being cleaned up or are potentially in need of some level of cleanup. The rest have either been cleaned up or were found not to have been contaminated. Contaminated sites range in size and complexity from gas stations with a single leaking underground tank of gasoline, up to large industrial chemical manufacturing sites covering many acres contaminated with numerous chemicals from many different sources. These sites, if not cleaned up under current regulatory requirements, could pose potential significant threats to human health and the environment.

Cleaning up these sites can be costly and complicated, and a complex regulatory system has been developed to oversee the process and, in some cases, directly pay for and manage site cleanups. Some sites are still owned and operated by the company that caused the contamination, and these owners are taking responsibility for the cleanup process. Some sites are being cleaned up by the current owner, a developer or government agency, with the costs being born by the previous owners or operators responsible for the contamination. Other sites are inactive or the current occupants are not engaging in practices that are currently causing contamination. Often, the contamination at these last types of sites was caused by previous owners or tenants, sometimes many years ago. These types of sites are referred to as Brownfields, commonly defined as properties that are contaminated, or thought to be contaminated, and are underutilized due to perceived remediation costs and liability concerns.

In the summer of 2006, the Contra Costa Hazardous Materials Commission began an assessment of the status of Brownfields and other contaminated sites in the County. The purpose of this assessment was to determine if policy recommendations to the Board of Supervisors were warranted that could help improve the identification and cleanup of Brownfield sites in the County. The Commission conducted this assessment by receiving presentations from local experts in the field on specific related topics, conducting case histories of selected sites in the County and surveys of local jurisdictions, and reviewing regulatory agency websites containing site-specific information.

## Background

The Commission received six presentations by local experts on Brownfield and contaminated site cleanup to better understand the policy issues and programs involved in the process. The presenters, their affiliation and the topics of their presentations are as follows:

- Jennifer Hernandez, Holland and Knight Law Firm: The use of the Polanco Act Redevelopment Agencies in Brownfield redevelopment.
- Jim Kennedy, Contra Costa County Redevelopment Agency: Brownfield cleanup activities by the County's Redevelopment Agency.
- Leonard Robinson, California Department of Toxic Substances Control: Overview of California Department of Toxic Substances Control's Brownfield Remediation Program.

- Barbara Cook, California Department of Toxic Substances Control: Use of deed restrictions in Brownfield remediation.
- Randy Starbuck, Redevelopment Agency for the City of Pittsburg: The use of the Polanco Act by the City of Pittsburg Redevelopment Agency to initiate site cleanup.
- David Zarider, TRC Solutions: The role of the private sector in site cleanup.

In addition, the Commission conducted a survey of all the jurisdictions in the County to determine what steps they had taken to identify known and potential Brownfield and contaminated sites within their jurisdiction. The Commission also undertook a detailed review of four Brownfield sites located in the County to determine if their case histories could point to needed changes in Brownfield policy and approach. Finally, the Commission reviewed the regulatory databases that contained information about contaminated sites in Contra Costa County to identify needed changes in Brownfield policy or approach.

## Findings

### I. Regulatory Structure

Regulatory jurisdiction over Brownfield and contaminated site cleanup is shared amongst four agencies at the federal, state and local level – the United States Environmental Protection Agency, the California Department of Toxic Substances Control, the California State Water Resources Control Board and Contra Costa Health Services.

At the federal level, the United States Environmental Protection Agency has the primary responsibility over sites on the National Priority List, usually sites that pose the greatest risk to public health and the environment. There are only two sites in Contra Costa County where the United States Environmental Protection Agency is the lead regulatory agency – the former United Heckathorn site in Richmond, and the former Concord Naval Weapons Station in Concord.

At the state level, two agencies can be the lead regulatory agency for site cleanup, the Department of Toxic Substances Control (DTSC), and the State Water Resources Control Board (SWRCB), both of which are agencies within the California Environmental Protection Agency. The State Water Resources Control Board divides the state into Regional Boards, and Contra Costa County falls within the jurisdiction of two of these Boards – the San Francisco Bay Regional Water Quality Control Board and the Central Valley Regional Water Quality Control Board. The border between these two Regional Boards runs north/south just west of the City of Antioch. DTSC-led sites are handled through their Regional office in Berkeley, except for school sites that are handled through a special group based in Sacramento. A site designation process has been legislatively mandated that determines which of these agencies will be the lead state agency for any particular site. State law also contains provisions that allow local agencies to be the lead agency for cleanup sites. Contra Costa Health Services has not yet chosen to apply for lead agency status for site cleanups.
DTSC keeps information on the sites they oversee or manage on a publicly accessible database called Envirostor. This database contains records on 161 sites in Contra Costa County. Of these sites, 53 are listed as active (including the two EPA-led sites), 60 are listed as certified as completed, 26 are listed as inactive (meaning further evaluation or action is needed), and 22 have been referred to other agencies (either to the Regional Water Quality Control Boards, other departments of DTSC that manage the

clean-ups as part of the facility's hazardous waste permit, or local government). These sites are also classified by how the sites came into the regulatory system. Sites are either classified as corrective actions (40), Federal Superfund sites (4), having a hazardous waste permit (12), part of the school program (9), a state response (56), or a voluntary cleanup (40).

Sites on the Envirostor database in Contra Costa County are distributed throughout the County, mostly along the historic industrial waterfront corridor stretching from Richmond to Antioch. The most sites are in West County (81) with the highest number being in the City of Richmond (63). The next highest concentration of sites is in East County (55) with the largest number being in Pittsburg (24). The smallest concentration of sites is in Central County (25) with the largest number being in Martinez (15).

The State Water Resources Control Board keeps information on the sites they oversee or manage on a publicly accessible database called Geotracker. There are 1177 records of contaminated or potentially contaminated sites in Contra Costa County on Geotracker. Almost half of these sites, 723, are cleaned up and closed Leaking Underground Storage Tanks (LUST) sites, mostly gas stations. The remaining 454 sites are leaking underground storage tanks or other contaminated sites where cleanup is still occurring (113), more assessment is needed or is occurring (293), or where verification monitoring is occurring (48).

Sites on the Geotracker database are also distributed throughout the County, though more are in the less-industrialized cities along the I-680 corridor than is the case for the Envirostor database due to the inclusion in this database of gas station underground storage tanks. Central County has the most sites (785) with the largest number being in Concord (212). The next largest concentration of sites is in West County (507) with the largest number being in Richmond (299). The smallest concentration of sites is in East County (315) with the largest number being in Pittsburg (112).

## II. Programs

The Commission learned from the presentations by the guest speakers that a number of programs exist to encourage and facilitate contaminated sites and Brownfield cleanup. Leonard Robinson from DTSC explained that Prospective Purchaser Agreements to limit liability have been developed to enable cleanups to occur. They and EPA also offer various grants and loans to help characterize the extent of contamination on sites and to help pay for cleanups. The Regional Boards administer several new programs called the Orphan Site Cleanup Account and the Orphan Site Cleanup Fund that provide assistance to clean up Brownfields caused by leaking underground storage tanks. DTSC has entered into Voluntary Cleanup Agreements with responsible parties to speed cleanups. Other means of promoting speedy cleanups and limiting liability for entities that clean up sites are the issuance of "No Further Action" and "Comfort" letters, agreements between the Regional Boards to accept each other's cleanup plans, model oversight agreements, and immunity agreements to qualified innocent landowners. Other steps that have been taken to make the cleanup and reuse process work better are AB 2061, which designates lead agency status, and an MOU between DTSC and the Regional Boards which allows them to coordinate their response to a site cleanup.

Both Jennifer Hernandez from Holland and Knight and Randy Starbuck from the Pittsburg Redevelopment Agency spoke about how the Polanco Act was a useful tool for Redevelopment

Agencies to promote site cleanups. The Polanco Act allows local Redevelopment Agencies to: 1) demand information from site owners within redevelopment project areas, 2) require site owners to collect information, and 3) collect that information themselves. The Act also allows Redevelopment Agencies to conduct cleanup activities and provides cost recovery tools for Redevelopment Agencies for these activities. Redevelopment Agencies do not have to own the property to require these measures, and the law provides them some immunity from further requirements from other agencies. It is a very effective tool because if site owners are unable or unwilling to cooperate, Redevelopment Agencies can use eminent domain to acquire property and recover costs from the site owners. Mr. Starbuck gave three examples of how the Pittsburg Redevelopment Agency has used the Polanco Act to move cleanup forward on contaminated sites.

## III. Efforts to Identify Sites in the County

One of the activities conducted by the Commission was to determine to what extent jurisdictions in the County had assessed the number of potentially contaminated sites that existed within their boundaries. Each jurisdiction was contacted to determine if they had done any type of comprehensive survey of potential sites. Two jurisdictions had undertaken some effort in this regard. Otherwise, jurisdictions relied on potentially contaminated sites to be identified by property owners or other regulatory agencies.

In 2002 the US EPA partnered with the City of Richmond and Contra Costa County to prepare an inventory of potential Brownfield sites in North Richmond. This investigation resulted in an inventory of 14 potential sites. In 2002 the City of Oakley undertook a comprehensive study to identify the known and potential Brownfield sites within its jurisdiction. Their redevelopment agency received a $200,000 grant from the Federal EPA to undertake this effort. They held three public meetings to let residents nominate potential sites for investigation. They identified 21 sites and conducted 21 Phase One investigations and one Phase Two investigation. Since their initial investigation they have found 10 more potential sites. After the initial identification phase, they used eminent domain to take over one site, and invoked the Polanco Act for their whole Redevelopment Project Area by resolution, about 1400 acres, which includes most of these Brownfield sites.

## IV. Use of Deed Restrictions to Achieve Final Cleanup Status

One of the key decisions that is made about a contaminated site is how clean it must be made. This determination takes into consideration the cost of cleanup vs. the remaining risks. Rarely, if ever, are sites cleaned up to original background levels. The primary driver of the decision as to how clean a site needs to be is the end use for which the site is intended. Different intended end uses have different cleanup standards, based on a consideration of who will be at the site, their potential for exposure, how long they will be at the site, and their vulnerability to harm. Generally, heavy industrial sites have the least stringent cleanup standards, light industry and commercial sites have the next most stringent cleanup standards, residential sites have the next most stringent cleanup standards, and school sites have the most stringent cleanup standards.

In certain cases, the oversight agency can approve cleanup plans that allow contamination to remain on site if the overall cleanup objectives for the site are met and restrictions are put on future uses of the site

to prevent exposure to, or release of, this contamination. These restrictions can limit the type of business or activity that can occupy the site as well as the type of specific actions that can occur, such as digging in certain areas. These restrictions are enforced by attaching a lien to the deed of the property that must be disclosed at sale or transfer of ownership, and followed by all future owners for as long as the restrictions remain in place. These restrictions can be removed if further cleanup is done at the site at a future date.

This type of deed restriction has been commonly used in cleanup plans for sites in Contra Costa County. A review of the databases for DTSC and SWRCB sites in the county indicates that 43 sites have been cleaned up, or are in the process of being cleaned up, with deed restrictions put in place because of contamination that has been allowed to remain on-site.

One observation made by the Commission about the use of this practice relates to the potential impact this could have on future land use planning and activities. Determinations as to the extent of cleanup needed on any particular site are primarily based on the site's current land use designation or, if identified by the owner or developer, designation of the intended immediate reuse. So if a site is currently zoned for industrial use, the cleanup goals are usually set assuming the future use will also be industrial.

However, the demographic and economic nature of Contra Costa County has been rapidly changing over the last 30 years. County population has been increasing dramatically, and industrial activity has been declining. Many former industrial areas have been converted to residential and commercial use, and many housing and commercial offices have been built on open space or agricultural areas near remaining industrial areas. This trend is projected to continue. Also, current efforts to address problems associated with urban sprawl and to curb global warming have promoted "smart growth" concepts that advocate infilling development into urban core areas where many Brownfield sites are located.

The practice of basing cleanup levels on current land use designations (usually industrial) instead of potential future land use designations (often commercial or residential), combined with allowing contaminated areas to remain on-site governed by deed restrictions, could shift the burden and cost of converting the use of these sites to future owners or jurisdictions, and away from the parties responsible for the contamination, if the responsible parties go bankrupt or flee responsibility after the original cleanup has occurred.

## V. Case studies

The Commission reviewed the status of four sites in detail to gain a better understand of potential policy issues that may exist.

Chemical and Pigment

This site, located in Bay Point on the edge of the former Concord Naval Weapons Station, was abandoned by its owners in 1998. The owners left behind considerable surface and subsurface contamination from the manufacturing of agricultural products such as fertilizers and soil amendments, including heavy metals and benzene. In 2002, DTSC took emergency actions to remove contaminants from the surface of the site and to secure fencing around the site. DTSC also issued an order to the

company and other potentially responsible parties that allows DTSC to oversee the investigation and cleanup of the site. In 2003, a stormwater treatment system was installed that is still pumping and treating contaminated surface water, and work began to remove all surface buildings and equipment. DTSC began a Remedial Investigation in 2004 to fully characterize the site and to ultimately be able to develop a cleanup plan for the site. The Remedial Investigation was completed in 2008 and the draft cleanup plan for the site is scheduled to be completed and submitted to DTSC in 2010. The last community fact sheet was published in July 2008, and the next one is scheduled to be published in 2010.

This site was first brought to the attention of the Commission by of one of the Commissioners who received complaints from community members that children were riding their bikes through the unsecured site. Barbara Cook, DTSC cleanup program branch chief, spoke to the Commission about the site in May 2008 and affirmed her agency's commitment to finishing the cleanup of the site. She indicated that the site will most likely remain zoned industrial and will probably require a deed restriction when the cleanup is complete.

Reichelt

This 3.3 acre site located along the northern side of West Gertrude Avenue, west of the Richmond Parkway in Richmond, was an auto dismantling and parts storage facility until 2001. DTSC investigated the site as early as 1997 and found evidence of contamination, and concluded that further investigation was warranted. The original property owner died in 2001 and DTSC issued an order to the new property owner in 2002 to investigate the extent of the contamination, and develop and implement a cleanup plan. That property owner removed the vehicles, debris, junk piles and numerous tires from the property. The remedial investigation was completed in 2007 and found the site contaminated with elevated levels of petroleum hydrocarbons, metals, and volatile organic compounds.

DTSC initially proposed to leave the site "as is" for development as a trucking facility, and to develop a land use covenant to restrict certain practices and to limit use only for commercial or industrial development. The proposal was appealed by a non-profit environmental group due to the intention to exempt the project from CEQA review and because of concerns that leaving the site "as is' with a protective covenant would limit future land use options on the site. DTSC amended the proposal by eliminating the identification of the immediate land use, and approved the Remedial Investigation and Land Use Covenant in February 2008. The site was sold again in October 2008, and the first Operations and Maintenance Report was submitted by the new property owner and approved by DTSC in January 2010.

Potential Hercules Middle School site

This 11-acre site, on the corner of Sycamore Ave. and Willet Street in Hercules, was once part of a gunpowder manufacturing plant, and later housed a wastewater treatment plant. It is currently used by the City of Hercules as a maintenance yard. In 2004, the West Contra Costa Unified School District considered purchasing the site to use as a school site and received a grant from the US EPA to conduct a Preliminary Environmental Assessment. This was done under the supervision of DTSC's Schools Unit, which enforces special cleanup requirements for proposed school sites. That investigation determined

that a more extensive site characterization would be necessary. The School District decided not to pursue further testing and the site became inactive at the end of 2005.

In May of 2008 the Commission informed Barbara Cook, DTSC Regional Cleanup Branch Chief, that the site was inactive, but still being administered by the Schools Unit. She promised to look into whether the site should be transferred to the regular cleanup program. In October of 2008 the City of Hercules applied for, and received, a grant to conduct further testing of the site. The intended use of the site was stated as a school, and remained under the supervision of the Schools Unit. In January 2009, DTSC approved the work plan for the testing. The final site investigation report was accepted by DTSC in May 2009. An additional year of groundwater monitoring to determine if the site is the source of contaminants present at site monitoring wells is still needed before the investigation can be completed.

Pittsburg Redevelopment Sites

The City of Pittsburg invoked the Polanco Act at three sites within the Pittsburg Redevelopment Project Area.

1) Bell Gas Station – This site, at 10th and Railroad, was under DTSC jurisdiction because the School District wanted to build a school on the site. But they wanted to use Underground Storage Tank funding to clean up fuel contamination on the site, so they needed to have Regional Water Quality Control Board cooperation. As a result, they developed a joint oversight agreement. The City used the Polanco Act to require the owner to clean up the site, and then the School District used Eminent Domain to purchase the property.

2) Property at 695 E 3rd Street. They formed a Unified Development Area for several waterfront properties. They launched an investigation and used the Polanco Act to compel the owner to clean up the site. During the process, the previous owner, Cal Cement, sold the property to Marine Express. The City is in Eminent Domain proceedings over the site. The cleanup is in litigation.

3) Posco Site LA. This is a 120-acre parcel next to the Antioch-Pittsburg Highway. It has been under DTSC oversight since the early 1990s. With DTSC approval requiring specified land use restrictions, the owners were planning to clean up the site to industrial standards by placing a cap over it. Posco tried to sell the property, but was unsuccessful. For the site to be developed for commercial use, it would need to be cleaned up to higher standards. The Redevelopment Agency invoked the Polanco Act to compel more investigation into the extent of the contamination. They are working with DTSC to determine what cleanup standards are appropriate for the site so that a deed restriction won't be needed that could hinder future overall development.

## VI. Site Monitoring and Review

A key aspect of ensuring that sites do not pose risks to the surrounding environment or Public Health over the long-term is follow-up monitoring. This is needed because the final remediation for many sites allows some contamination to remain in place. These sites are then subject to deed restrictions,

covenants, and/or administrative, institutional, or engineering controls to keep them from exposing people or wildlife, or the environment. Sites with Operation and Maintenance plans are reviewed annually, and five-year reviews are conducted on other sites, such as those with deed restrictions. As sites change hands over time and institutional memory fades, systematic site reviews are needed.

These reviews are important to make sure that site security measures, such as fencing and posting, are still in place, and that control measures, such as caps, landscaping and barriers, are still in working to prevent human and environmental exposures. Also, cleanup standards change over time, and reviews can determine if existing site mitigation measures are still considered adequate under current standards.

Several notable examples in Contra Costa County point to why site reviews are so important:

- The former United Heckathorn site in Richmond, a Federal Superfund site, was considered cleaned up in 1996 but the five-year review in 2001 found that the remediation had not achieved the clean-up goals. Additional remediation is being considered for the site.
- The Richmond Townhouse Apartments on Pullman Ave. in Richmond were supposedly cleaned up for lead contamination in 1975. No further review was ever required for the site, but in 1998 samples were taken that found elevated levels of lead. An emergency cleanup was then initiated to remove contaminated soil from the site.
- The Pt. Isabel site in Richmond was cleaned up under the jurisdiction of DTSC, with a 5 year review done in 1992, but oversight was turned over to the San Francisco Regional Water Quality Control Board, and it doesn't appear that any 5-year reviews have been done since then. This situation is currently under investigation by the Regional Water Quality Control Board.
- Concerns have been raised that Area O of the Marian Bay Cleanup site was supposed to have had a deed restriction placed on it with requirements for five-year reviews when it was first cleaned up, but it appears neither was done. This situation is currently under investigation by the Department of Toxic Substances Control.

## Recommendations

1. **The Board of Supervisors should direct the County's Hazardous Materials Program to develop a complete, centralized, publicly accessible database of all contaminated and potentially contaminated sites in the County based on data available from the California Department of Toxic Substances Control, the State Water Resources Control Board and County databases.**

This database should combine the files in DTSC's Envirostor database, the SWRCB's Geotracker database, and any unique records contained in the Hazardous Materials Program's files. This database should be designed in such a way as to utilize GIS or some other mapping system so that users of the database can visually see the location of contaminated sites in the County and determine the jurisdictions in which they reside. This database should be accessible to the public via the Hazardous Materials Program's web page. Ideally, this database would be designed to enable users to accomplish recommendation 2.

2. **The Board of Supervisors should recommend to the California Department of Toxic Substances Control and the State Water Resources Control Board that their contaminated site databases highlight when monitoring reports and five-year reviews of sites are due. The Board of Supervisors should direct the County's Hazardous Materials Programs to develop a system to track the implementation of the long-term monitoring and site-review requirements for County sites that have such requirements in their final remedial action plans, if they are highlighted on these databases, and follow up as appropriate when they discover sites are overdue for review.**

Long-term monitoring and maintenance plans have been developed for many sites that have been allowed to leave some level of contamination on them as part of the final remedial action. These requirements can range from continuous monitoring requirements to 5-year reviews of the site status. Long-term protection of the environment and Public Health from the contaminants left on these sites is dependant on these monitoring and site review plans being carried out adequately. Ideally, the mapping system recommended above could be used to determine when these reviews are due.

3. **The Board of Supervisors should direct the County's Hazardous Materials Programs and Department of Conservation and Development to work together to identify contaminated sites within Urban Limit lines in the County to aid in SB 375 planning.**

SB 375 will require regional land-use planning efforts to curb greenhouse gas emissions from cars and light trucks. This Sustainable Communities Strategy will likely include smart growth provisions that will allow jurisdictions to infill underutilized land in their sphere of influence. Highlighting contaminated sites within Priority Development Areas will help focus attention on these sites for cleanup prioritization.

4. **The Board of Supervisors should continue to direct appropriate County Departments to seek grants to identify, investigate and remediate potentially contaminated sites within Contra Costa County. They should direct appropriate County Departments to work with local jurisdictions, special districts and private developers within Contra Costa County to apply for these grants where applicable.**

Numerous grants are available from the Federal Environmental Protection Agency and the California Department of Toxic Substances Control to identify, investigate and remediate Brownfields and other contaminated sites. During the course of the Commission's investigation, they saw four examples of where local jurisdictions received grants for these purposes, and possibly other grants have been given locally as well.