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Project No. 104219005

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Subject: Hazardous Materials Technical Document
Downtown Community Plan Update and MEIR
San Diego, California

Dear Mr. Rask:

This hazardous materials technical document has been prepared to assist the Centre City Development Corporation in addressing specific issues regarding the Downtown Community Plan Update and Master Environmental Impact Report.

We appreciate the opportunity to be of service to you on this project. Should you have any questions, please contact the undersigned at your convenience.

Respectfully submitted,
NINYO & MOORE



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Distribution: (1) Addressee

1. INTRODUCTION

The intent of this document is to assist the Centre City Development Corporation (CCDC) in performing a hazardous materials constraints analysis as part of the Downtown Community Plan Update and Master Environmental Impact Report (MEIR). This document presents a summary of current downtown San Diego redevelopment trends in hazardous materials management from a regulatory and practical perspective, suggests methods that have proven effective in the identification, assessment, and mitigation of environmental issues, provides general conclusions regarding the potential impact of hazardous materials releases on redevelopment in the Downtown Community Plan Area, and provides a brief summary of regulation programs and funding options for redevelopment projects in California.

The redevelopment of properties in the downtown area of the city of San Diego is required to be approved by CCDC, may involve public funding, and often carries the stigma of environmental impairment (i.e., brownfields). The public nature of these projects elicits a heightened sense of awareness and participation by the public, politicians, multiple proponents/opponents, potentially responsible parties, environmental groups, and regulators with varying agendas, perceptions, and “mandates” regarding how each project should be planned, funded, and developed. California Community Redevelopment Law empowers CCDC to provide the leadership necessary to proactively meet these challenges and to mitigate hazardous materials issues in a manner that provides the most benefit to the people of San Diego.

Intelligent risk management decisions regarding implementation of appropriate mitigation measures for properties selected for redevelopment should be made after considering site-specific environmental conditions, past and future site use, project economics, and regulatory requirements. Because these considerations are in a constant state of flux, yet should be considered as a whole, hazardous materials studies should be initiated once the project location, objectives, and stakeholders have been tentatively identified.

2. BACKGROUND

In January 1992, CCDC issued a report prepared by ERC Environmental and Energy Services Company (ERCE) titled *Final Centre City Redevelopment Project Community Plan and Related*

Documents, Hazardous Materials Assessment. This report presents information regarding hazardous materials release sites located within the downtown community plan area, focusing on sites within the planning area that were known hazardous release sites, underground storage tank (UST) locations, permitted hazardous waste generator facilities, and facilities with permits for the storage, use, or disposal of regulated materials. General impacts and mitigation measures regarding hazardous materials (permitted) sites, hazardous waste release sites, USTs, and asbestos also are presented. Information contained in the report was obtained through communication with regulatory agencies, and performance of a historical land use study including reviews of aerial photographs, topographic maps, Sanborn fire insurance rate maps, federal and state lists of known hazardous waste sites, and site-specific hazardous waste studies. However, as stated in the report, “Limitations to a study of this magnitude relate to the physical extent of the Planning Area and the complexity of determining specific use of hundreds of individual parcels of land over a period of approximately 100 years. The overall goal of this study is to provide a generic view of historic land use within the planning area as a whole.”

The report included maps showing the approximate locations of hazardous waste release sites within the planning area. From the mapped data, ERCE concluded that release sites were located throughout the planning area. However, the report presented additional data on two specific areas with somewhat larger-scale issues: 1) the “groundwater plume” in the Marina District, and 2) contaminated soil in the southern portion of the East Village Redevelopment Area and adjacent Marina District.

The “groundwater plume” in the Marina District had attracted a lot of attention in the mid-1980s to early-1990s; so much so that, at least locally, it was referred to as the “Blob.” Assessment data indicate that the plume is bounded by G Street to the north, J Street to the south, and to the east and west by Fourth Avenue and Front Street, respectively. This plume, which is likely a group of neighboring or coalescing plumes of diesel/gasoline free product on the groundwater, was initially estimated to contain as much as 450,000 gallons of free product but was later recalculated to contain approximately 64,000 gallons (Huntley, et al, 1991). Huntley, et al, also concluded that the free product was stable, but the dissolved phase may be influenced by Convention Center dewatering. The San Diego Regional Water Quality Control Board (RWQCB) issued a Cleanup

and Abatement Order (CAO) to the responsible party. A significant portion of the remediation was performed concurrently with redevelopment in the area. The CAO is still in effect, although portions have been rescinded. Subsequent redevelopment in this area, consisting of residential, commercial, retail, and restaurant uses (e.g., 101 Market, Renaissance) and planned development (e.g., KUSI mixed use) indicate that the plume (dissolved and free product) does not pose a significant roadblock to redevelopment. However, any redevelopment in this area should be prepared to address potential issues relating to the presence of petroleum hydrocarbon contamination in soil, soil vapor, and groundwater.

The other problem area discussed in the 1992 ERCE report involved portions of the East Village Redevelopment Area and adjacent Marina District. This area has experienced heavily industrialized uses such as rail transportation, a manufactured gas plant, foundries, shipbuilding, petroleum storage and distribution pipelines, landfills, and burn dumps. Many of the environmental concerns in this area either have been or will be mitigated by redevelopment activities related to the San Diego Padres Ballpark and ancillary development, hotel construction, and expansion of Metropolitan Transit Development Board, Port of San Diego, and Convention Center facilities. Therefore, the majority of potential environmental contamination issues for this area alluded to in the 1992 ERCE report are being or will be addressed.

The ERCE report also presents an approach (e.g., Phase I and II Environmental Site Assessments (ESAs), risk assessment, establishing cleanup goals, remediation) to address general types of environmental conditions that may pose a risk to human health, the environment, and redevelopment. The activities and sequencing presented in the ERCE report are still applicable, but the available regulatory, technical, funding, and legal considerations and options have changed considerably. For example, the Polanco Act, the California Environmental Protection Agency (CalEPA) Site Designation Program, the San Diego County Department of Environmental Health (DEH) Voluntary Assistance Program (VAP), American Society for Testing and Materials (ASTM) Standard Practices, lender requirements, insurance options, risk-based closure, and DEH Site Assessment and Mitigation (SAM) Manual have significantly altered the way that hazardous materials issues are handled in San Diego and have established a “standard of care” that did not exist when the ERCE report was prepared in 1992. However, the ERCE report

represents one source of historical information that should be reviewed prior to redevelopment in the planning area.

3. HAZARDOUS MATERIALS APPROACH FOR REDEVELOPMENT PROJECTS

A variety of methods can be utilized to identify potential environmental issues regarding a property, to assess the extent and severity of existing contamination, to remediate the contamination in a cost-effective manner, to meet regulatory compliance requirements, and to manage low-level, post-remediation contamination that may be an issue during construction. A generalized project management approach is summarized below. Note that this is a suggested approach and is not intended to be a cookbook method that must be followed for every project. As with any effective project management approach, experience and professional judgement are essential in gathering and evaluating data and formulating conclusions and recommendations necessary to reach informed risk management decisions.

In general, the recommended project approach for redevelopment of properties in downtown San Diego would be as follows:

- *Understand your site.* Once a redevelopment site has been tentatively identified, perform a Phase I ESA in general accordance with the appropriate version of the ASTM standard. Note that sites with conditions that require oversight by the Department of Toxic Substances Control (DTSC) (e.g., potential school sites, Resource Conservation and Recovery Act facilities) may require additional regulatory compliance and more extensive evaluations.
- *Develop and define the project description.* The project may be constrained by conditions identified in the Phase I ESA, scheduling, funding, and other issues and obligations. The Phase I ESA, being a historical review, can indicate many factors that might require further assessment as a result of the physical characteristics of the project, its proposed end use, and regulatory compliance requirements.
- *Develop a partnering relationship with the project stakeholders.* As site conditions and the project description become focused, it is possible to identify stakeholders essential to the success of the proposed project. These stakeholders will become members of the project team, and it is to the benefit of the project proponent to encourage their participation. Team members can include CCDC, the developer, potential contractors, regulators, environmental consultants, attorneys, local members of non-governmental organizations, lenders, and others. It is important to identify the decision makers and to instill a partnering relationship among the team members from the beginning and to maintain this relationship throughout the duration of the project.

- *Develop a strategy for assessing and remediating potential environmental conditions.* Each project will require site-specific levels of assessment, investigation, characterization, risk assessment, data management, quality assurance/quality control, and public outreach programs in order to address and mitigate the regulatory issues, construction requirements, and end use. Consider the implementation of an environmental strategy, if one is suggested by the Phase I ESA, that takes maximum advantage of redevelopment activities and takes into account remediation requirements, including the potential need for space on site to segregate and characterize soils or construction dewatering effluent that may require special handling. The data quality objectives and data quality assessment criteria should be established at this stage.
- *Address Hazardous Building Materials.* If the project involves demolition of existing structures, a hazardous building materials survey (HBMS) would likely be recommended by the Phase I ESA. HBMSs are typically performed on buildings that are scheduled for renovation or demolition. The objective of the HBMS is to identify and quantify building materials containing asbestos and lead-based paint, and to quantify potential mercury-containing thermostats/switches, polychlorinated biphenyl-containing items (e.g., light ballasts, switches, and transformers), fluorescent light tubes, and Freon™-containing refrigeration systems.

After completion of the survey, prepare a HBMS report, presenting data and summarizing the assessed materials. The report typically includes a site location map, site description, laboratory testing information, conclusions and recommendations, tables summarizing the building materials assessed, and quantities of identified materials. Depending on the results of the HBMS, it may be necessary to prepare and implement a mitigation plan to address the materials of concern and regulatory compliance requirements (e.g., permitting, notifications, record keeping).

- *Perform a Phase II ESA.* If a Phase II ESA is recommended as a result of the Phase I ESA, a decision needs to be made regarding the participation of a regulatory agency, or agencies, so that proper guidance, scheduling, documentation, permitting, notifications, and approvals are considered in planning the scope of the Phase II ESA. (Examples of the regulatory programs available to redevelopment projects are discussed in a later section of this document.)

If it is decided that a Phase II ESA is required, consider whether it should be incorporated into a Property Mitigation Plan (PMP). Such plans can often efficiently combine remedial activities with specific construction plans and approaches. PMPs have been approved and used to this end in CCDC's redevelopment area. A PMP can incorporate site excavation plans and future end uses so that risk-based solutions can be explored. Where appropriate, prepare a preliminary site conceptual model (SCM) that would be referenced in the preparation of a focused Phase II ESA work plan or PMP to address potential contaminants, pathways, and receptors. As the field data are collected, review the SCM to determine if the data require modifications to the SCM, data quality objectives, and Phase II ESA/PMP scope of work. This process requires that experienced, senior people perform the field work so that appropriate and timely decisions regarding the data quality objectives can be made in the field as data become available. This minimizes costly and time-consuming field mobilizations. When the

data no longer require modification of the scope of work, data quality objectives, or SCM, the fieldwork can be considered complete. Appropriate Phase II ESA and property mitigation reports should be prepared and submitted according to the requirements of the regulating agency.

Worker and community health and safety plans regarding contaminants of potential concern should be prepared at this stage. To maximize their effectiveness and efficiency, health and safety plans should be prepared and maintained to address the evolving requirements of the various stages of the project (e.g., construction, remediation) and unknowns (e.g., emergency response).

- *Prepare a Project-Specific Soils Protocol.* The project-specific soils protocol should present emergency response and soil excavation monitoring procedures, stockpile management plans, on-site reuse and off-site disposal/reuse options, reporting/tracking documentation requirements, and should identify the team members, their roles and responsibilities, and contact information.
- *Prepare Contractor Bid Specifications.* The contractor bid specifications should document known and potential environmental concerns (e.g., residual contamination), present worker and community health and safety issues, and identify specific protocols and responsibilities in handling hazardous materials (known and unknown) that may be encountered during construction.
- *Perform a Health and Ecological Risk Assessment.* Site-specific Health and Ecological Risk Assessments coupled with fate and transport studies may be required to recommend cleanup levels that are protective of human health (e.g., construction workers and site occupants, workers, and visitors) and the environment (e.g., groundwater).
- *Know the Regulatory Requirements.* When an appropriate regulatory agency acknowledges that the work described in the PMP or other work plan has been implemented effectively, regulatory closures will be issued (e.g., Comfort letter, No Further Action letter, Polanco Act immunity, or a Certificate of Completion) that, in some cases, have legal consequences that can end further regulatory-driven hazardous materials liability and trigger milestones for financing or insurance considerations, as well as other site-specific goals.
- *Develop Generic Protocols.* When a project is large enough, as when an entire block or a multi-block area comprised of several parcels is being redeveloped, consider methods of developing generic protocols that can standardize decision making for a particular site, potentially saving time and money. This is a process that CCDC utilized in its acquisition and preparation of the properties within the Ballpark District Redevelopment Project. In that project, CCDC utilized a Master Work Plan that was supplemented by a community health and safety plan, PMPs, and soils reuse and export protocols for the different phases of the redevelopment project.

Due to the dynamic nature of dealing with hazardous materials issues during redevelopment projects, the project team must maintain a vigilant, forward-thinking project management style that incorporates effective communication, planning flexibility, innovative approaches to problem solving, and team cooperation that is committed to the overall success of the project.

4. HAZARDOUS RELEASE REGULATIONS/PROGRAMS/FUNDING MECHANISMS

The following paragraphs discuss various regulations, programs, and funding mechanisms to support the investigation and remediation of hazardous release sites on properties within CCDC's jurisdiction. The majority of these regulations, programs, and funding mechanisms are available throughout the state. These are typically used together in various combinations and should be considered in selecting a course of action prior to redeveloping properties that are suspected or known to be contaminated.

4.1. Polanco Redevelopment Act

Polanco Redevelopment Act, California Health and Safety Code section §33459 et seq. (Polanco Act), provides buyers and developers, working with local redevelopment agencies, an opportunity to redevelop properties located in urban areas despite the potential, actual, or perceived presence of environmental contamination. Specifically, the Polanco Act allows developers to obtain critical liability protections against future claims arising from existing contamination.

In broad terms, the Polanco Act provides local redevelopment agencies the authority to take "any action necessary" to remedy or remove a release of hazardous substances on, under, or from any property within an identified redevelopment area. Such action may include acquiring reports on environmental conditions at the property, issuing demands for cleanup and abatement, acquiring the property through use of its eminent domain power, and performing necessary remediation at the property (including the recovery of costs and fees associated with such remediation). The Polanco Act also permits a redevelopment agency to contract with third parties to acquire and/or undertake cleanup of property.

One of the primary benefits of the Polanco Act is that, upon completion of remediation under an approved remediation plan, the statute provides eligible parties with immunity from environmental liability for issues addressed in the cleanup plan. Parties eligible to receive such immunity include the local redevelopment agency, and any party that (a) enters into an agreement with a redevelopment agency for redevelopment of the property, (b) purchases the property after a party has entered a redevelopment agreement with a redevelopment agency, or (c) provides financing to either of the above developers/purchasers of the prop-

erty. Thus, the benefits and protections of the Polanco Act may be enjoyed not only by redevelopment agencies, but also by other eligible parties working with redevelopment agencies.

The Polanco Act also provides the redevelopment agency with the authority to facilitate and/or oversee the review and approval of environmental planning and remediation documents. The Polanco Act has a unique “fee shifting” provision that allows the redevelopment agency to recover its attorney’s fees as part of its reimbursable response costs. Finally, the protection available to developers, future purchasers, and lenders under the Polanco Act can provide added security (and hence value) in the sale and leasing of the property. From a practical perspective, local support for a redevelopment project, in the form of redevelopment agency concurrence with project planning, timing, and goals, can be critical in obtaining discretionary agency approvals throughout the development process.

4.2. Site Designation Program

The purpose of the Site Designation Program (California Health and Safety Code §25062 et. seq.) is to allow a responsible party who agrees to carry out a site investigation and remedial action to request the Site Designation Committee (Committee) within the Cal/EPA to designate a single state or local agency (Administering Agency) to oversee the site investigation and remedial action. The Committee consists of six members representing the Cal/EPA, the Air Resources Board, DTSC, the Office of Environmental Health Hazard Assessment, the State Water Resources Control Board (SWRCB), and the Department of Fish and Game. Use of this process is required if the project proponent wants to use a local agency to oversee a “Polanco” cleanup in certain circumstances. This process requires approximately 90 days of lead time to implement.

4.3. DEH Voluntary Assistance Program (VAP)

The VAP is a voluntary option for project oversight on various types of properties that are environmentally impacted by hazardous substances. Through the VAP, members of the SAM team at the DEH provide consultation, overview, and report concurrence on projects involving properties suspected or known to be contaminated with hazardous substances. The SAM utilizes current guidelines and policies of the DEH and RWQCB to reach site assessment and cleanup goals at sites under the VAP. Assistance is customized to meet the needs of the applicant. The objective of the VAP is to allow rapid and cost-effective resolution of contamination problems. Examples of projects that have been processed through the VAP program include conversion of a property from agricultural to residential land use, conversion of a gas station property to a retail facility, a release of solvent from a dry cleaning facility, review of work plans prior to initiating work, and review of assessment and mitigation reports for lenders.

Under the VAP program, the following conditions currently apply:

- The DTSC and the RWQCB are notified of DEH oversight.

- All reports submitted to the VAP program are available for public review.
- DEH is allowed 30 days to review the initial documents.
- Fees are established by the County of San Diego, and billing is performed quarterly.
- Upon satisfactory completion of all activities, a “no further action” letter or concurrence letter will be issued.

An applicant may withdraw from the program through submittal of a written notification and payment of accrued fees. To apply to the program, the applicant must fill out a one-page application form that describes what the applicant wants from the DEH, and return the application form to the DEH with a check, which covers set-up fees and initial DEH review. The most commonly submitted documents are work plans, Phase I ESA reports, Phase II ESA reports, and health risk evaluations.

4.4. United States Environmental Protection Agency (USEPA) Targeted Site Assessment Program

The USEPA Region 9 has developed the Targeted Site Assessment Program, a brownfields program initiative to help municipalities, redevelopment agencies, and community development corporations redevelop properties known or suspected to be contaminated. Brownfields sites are defined as vacant or underused commercial or industrial facilities where redevelopment is complicated by actual or perceived contamination. Under this initiative, USEPA will conduct targeted site assessments at selected sites in California, Arizona, Hawaii, Nevada, and on tribal lands. The assessments will determine the nature and extent of contamination and provide preliminary cost estimates for cleanup. Several sites in Region 9 have already been selected for this program.

The Targeted Site Assessment Program is being offered to public or nonprofit entities that currently have redevelopment plans for property that is known or suspected to be contaminated. The property should either be currently owned by the agency/municipality/development corporation or should be property that these agencies can obtain ownership of through other means (e.g., tax foreclosure). In addition, abandoned properties (properties which the current owner has shown no interest in, has not paid taxes on, and does not have the resources to conduct the required site assessment work for) are eligible for the program. Sites contaminated only with petroleum products are not eligible for this program.

A Targeted Site Assessment would encompass one or more of the following activities:

- a screening assessment, including a background and historical investigation and site inspection,

- a full site assessment, including sampling activities, to identify the types and concentrations of contaminants and the areas of contamination that should be cleaned up prior to reuse, and
- establishment of cleanup options and cost estimates based on future uses and redevelopment plans.

Environmental consultants under contract with USEPA will conduct Targeted Site Assessments. Currently, the program does not provide funds to conduct cleanup or building demolition activities. The USEPA will select sites for the program for which firm redevelopment plans have been prepared. The redevelopment can involve the creation of commercial, industrial, residential, recreational, or conservation uses. Projects that have financing available for the cleanup, or that offer other unique incentives for development (e.g., tax increment financing) will be given higher priority.

4.5. CALReUSE Program

CCDC is a “strategic partner” with the California Pollution Control Financing Authority, which created the CalReUSE program to spur development of brownfields properties. CalReUSE provides funding to projects in CCDC’s redevelopment area to be used for site assessment and remediation of land with contamination or perceived contamination. CalReUSE provides forgivable loans to fund site assessment and characterization, technical assistance, and remedial action plans. As a strategic partner, CCDC will work with CalReUSE to prioritize and select projects, approve loans, and administer the program.

Sites that will be considered for the program include those with potential economic beneficial reuse, but that are not currently redeveloped due to lack of information regarding potential contamination, and sites that are likely to be redeveloped if proven economically feasible. Economically feasible projects are those that are supported by quality development entities with proven track records, and projects that, without CalReUSE resources, would most likely not move forward. The loan criteria for the program are provided below:

- the maximum loan for an individual project amount is \$125,000,
- the maximum term of the loan is 36 months,
- a 25% match is required,
- a portion of the loan may be forgiven under certain circumstances, and
- the current interest rate is approximately 6%.

4.6. CLEAN Loan Program

In 2000, Governor Gray Davis signed into law the “Cleanup Loans and Environmental Assistance to Neighborhoods (CLEAN) Program” (Senate Bill 667, Sher) establishing new financial incentives to encourage property owners, developers, community groups, and local governments to redevelop abandoned and underutilized urban properties in California. The

CLEAN program was established to provide low interest loans up to \$2.5 million for the cleanup or removal of hazardous materials where redevelopment is likely to have a beneficial impact on the property values, economic viability, and quality of life for a community.

Unfortunately, due to the recent state budget reductions, funds are currently unavailable for new CLEAN loans. However, potential applicants are encouraged to complete an online application, which will enable the CLEAN Program to determine the need of constituents when funding does become available.

4.7. California Land Environmental Restoration and Reuse Act

The California Land Environmental Restoration and Reuse Act has provisions similar to the Polanco Act and establishes a redevelopment process applicable to local government agencies.

The City of San Diego is currently preparing an ordinance to implement this program. Either DTSC or RWQCBs can oversee cleanup activities that are conducted under this program (except in certain circumstances where local agencies may oversee the cleanup activities). Cal/EPA has developed guidelines to describe the process that is used to select the oversight agency.

Cal/EPA is responsible for developing advisory “screening values” for hazardous substances that are typically found at brownfields sites. These values will serve as reference numbers to help developers and local governments estimate the costs and extent of cleanup of contaminated sites, providing valuable information in their development decisions. Cal/EPA’s Scientific Peer Review Program will review the screening values that will be developed. The first step in this process will be to peer review the San Francisco RWQCB’s risk-based screening levels (RBSLs). The request for peer review is expected to be sent to the President of the University of California shortly.

The RBSLs are intended to help expedite the preparation of environmental risk assessments at sites where impacted soil or groundwater has been identified. As an alternative to preparing a formal risk assessment, soil and groundwater data collected at a site can be directly compared to the RBSLs and the need for additional work evaluated. It is anticipated that RBSLs will be especially beneficial for use at small- to medium-size sites, where the preparation of a more formal risk assessment may not be warranted or feasible due to time and cost constraints.

DTSC will conduct a pilot program in southern California to evaluate how screening values are used in cleanup decision-making at brownfields, and with that information guide the development of its own screening values. Cal/EPA has developed a brochure describing this pilot project. To better understand the processes that govern cleanup decisions, Cal/EPA is preparing information that details the cleanup processes of both DTSC and RWQCBs.

4.8. SWRCB Tank Fund

Federal and state laws require every owner and operator of a petroleum UST to maintain financial responsibility to pay for any damages arising from their tank operations. The Barry Keene Underground Storage Tank Cleanup Fund Act of 1989 was created by the California Legislature and is administered by SWRCB to provide a means for petroleum UST owners and operators to meet the federal and state requirements. The Fund also assists a large number of small businesses and individuals by providing reimbursement for unexpected and catastrophic expenses associated with the cleanup of leaking petroleum USTs. In addition, the Fund provides money to the RWQCBs and local regulatory agencies to abate emergency situations or to cleanup abandoned sites that pose a threat to human health, safety, or the environment, as a result of a petroleum release from a UST.

Established by SB 299 in 1989 and modified by SB 2004 in 1990 and by other subsequent legislation, the Fund requires every owner of a petroleum UST that is subject to regulation under the California Health and Safety Code to pay a per-gallon fee to the Fund. This fee, which began on January 1, 1991, has increased over time and currently generates in excess of \$180 million annually.

To be eligible to file a claim with the Fund, the claimant must be a current or past owner or operator of the UST from which an unauthorized release of petroleum has occurred, and be required to undertake corrective action as directed by the regulatory agency. Other eligibility conditions include compliance with applicable state UST permitting requirements and regulatory agency cleanup orders.

The Act sets forth a claim priority system based on claimant characteristics. The highest priority, Class A, is reserved for residential tank owners. The second priority, Class B, is reserved for small California businesses, nonprofit organizations, and governmental agencies with gross receipts below a specified maximum. The third priority, Class C, is for certain California businesses, nonprofit organizations, and governmental agencies not meeting the criteria for Class B. The fourth priority, Class D, is given to all other eligible claimants.

Under statute, the SWRCB must update the Priority List at least once a year to include new claims. Since the fall of 1993, the SWRCB has been updating the list monthly. Claims from previous updates retain their relative ranking within their priority class with new claims ranked in their appropriate class below those carried over from the previous list. New claims in a higher priority class must be processed before older claims in a lower priority class.

There are two exceptions to the priority system. In 1993, the Legislature amended the Act to require the Fund to award approximately 15 percent of its funds annually to any lower priority classes that would not otherwise be funded (i.e., Class C and D claimants each receive at least 15 percent of the annual funding). In addition, legislation signed by the Governor on July 19, 2000 provides immediate funding for Fire Safety Agencies who submitted applications to the Fund by January 1, 2000.

Pre-approval is a method by which the claimant can come to an understanding with the Fund regarding eligible reimbursable costs prior to starting the cleanup. If the proposed project activities are completed as presented to and approved by the Fund for those costs that were pre-approved, reimbursement is virtually assured.

5. CONCLUSIONS

When appropriate planning is used, hazardous materials contamination issues in downtown San Diego have not been and are unlikely to be considered a fatal flaw to redevelopment. This is largely due to the increasing trend toward risk-based remediation and closure, innovative soil reuse options, the non-beneficial use designation for groundwater beneath the downtown area, and the evolution of regulations, programs, guidelines, and funding options available to redevelopment projects. Intelligent and efficient data collection and management, improved risk assessment and fate and transport models, and advances in engineering controls and remediation and construction techniques, along with innovation, flexibility, and effective planning can minimize land use restrictions in downtown San Diego that are based strictly on potential impacts to human health or the environment related to the presence of hazardous materials.

It cannot be overemphasized how important team selection and definitions, and candid, comprehensive communication are to the process of redevelopment. The responsibility and authority of each team member must be clearly defined, understood, and agreed to from the beginning, and mechanisms must be put in place to modify each team member's role to address project unknowns. Early understanding of site conditions and project goals will foster intelligent, innovative, and cost-efficient approaches to the assessment and mitigation of environmental site conditions. These processes are most profitably employed early, before project goals are formed that may later prove to be infeasible. CCDC's staff and consultants are available to support this activity as appropriate.

6. REFERENCES

ERC Environmental and Energy Services Company (ERCE), 1992, Final Centre City Redevelopment Project Community Plan and Related Documents, Hazardous Materials Assessment: dated January.

Huntley, et, al, 1991, An Analysis of the History, Distribution, and Movement of the BLOB, a Hydrocarbon Pool Underlying Downtown San Diego.