





Final Remedy Decision for Former Romic Environmental Technologies Corporation Facility East Palo Alto, California

and Response to Public Comments on September 2007 Statement of Basis





# **Final Remedy Decision**

for

Former Romic Environmental Technologies Corporation Facility East Palo Alto, California ID# CAD009452657

and

**Response to Public Comments** on September 2007 Statement of Basis

Prepared by

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#### **1. Executive Summary**

This Final Remedy Decision and Response to Public Comments (Final Remedy Decision) explains the final soil and ground water remedy that the U.S. Environmental Protection Agency, Region 9 (U.S. EPA or Agency) has selected for the former Romic Environmental Technologies Corporation (Romic) facility, East Palo Alto, California. This Final Remedy Decision also responds to the public comments U.S. EPA received on the "Statement of Basis for Soil and Ground Water Remedy, Romic Environmental Technologies Corporation, East Palo Alto, California," September 14, 2007 (September 2007 Statement of Basis).

U.S. EPA's September 2007 Statement of Basis was subject to a 45-day public comment period that began on September 17, 2007 and closed on November 1, 2007. The September 2007 Statement of Basis presented U.S. EPA's proposed remedy to address soil and ground water contamination at the former facility. U.S. EPA received 139 public comments on the September 2007 Statement of Basis. Appendix A of this Final Remedy Decision is U.S. EPA's response to the public comments. Please also refer to Section 3 below for details on public participation related to this final remedy selection and modifications made to the proposed remedy contained in the September 2007 Statement of Basis.

U.S. EPA coordinated with the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) and the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) in selecting the remedy.

Romic was a 12.6 acre hazardous waste management facility where historical operations included solvent recycling, fuel blending, wastewater treatment, and hazardous waste storage and treatment. The primary contaminants in the soil and ground water are volatile organic compounds (VOCs). Ground water contamination extends below most of the former facility to a depth of at least 80 feet below ground surface. Ground water at the site flows east toward San Francisco Bay. Ground water at the former Romic facility is not a drinking water source.

The final remedy U.S. EPA has selected includes the following:

- a site wide subsurface investigation;
- ground water and soil remediation;
- ground water and surface water monitoring;
- financial assurance for construction, operation, monitoring and maintenance of the ground water and soil remediation system;
- land use restrictions with a risk management plan;
- five-year remedy performance evaluation reports; and
- progress reports.

The final remedy is further described in Section 5, Final Remedy for Soil and Ground Water Contamination, of this Final Remedy Decision.

The remedial approach selected by U.S. EPA to clean up contamination at the former Romic facility uses enhanced biological treatment, monitored natural attenuation, excavation and removal of contaminated soils, and maintenance of the existing site cover. Enhanced biological

treatment involves injecting a mixture of cheese whey, molasses and water into the solventcontaminated soil and ground water to enhance the natural breakdown of the contaminants. Romic is currently using biological treatment to remediate contaminated soil and ground water at several locations throughout the former facility as part of a U.S. EPA approved interim remedial measure. Expansion of the interim remedial measure, using enhanced biological treatment, is the one of the remedial technologies selected to address the contamination at the former facility.

The final remedy also includes cleanup objectives that specify action levels for ground water, surface water and indoor air vapor intrusion for future redevelopment. The cleanup objectives for (1) ground water are the Maximum Contaminant Levels (MCLs) for drinking water, (2) surface water are the Surface Water Estuarine Screening Levels, developed by the RWQCB and (3) indoor air vapor intrusion are U.S. EPA's risk-based concentrations for ambient air. The cleanup objectives are further described in Section 6, Media Cleanup Objectives, of this Final Remedy Decision.

Contaminated sediments in the slough adjacent to Romic's eastern boundary are not addressed in this Final Remedy Decision but will be covered in a later action. Additional ecological studies are being conducted at the slough to gather further data on the extent of contamination and its possible impacts on organisms that live in the sediment.

The former Romic facility stopped accepting waste on August 3, 2007 and is undergoing closure. Regulatory oversight of the facility closure is the responsibility of DTSC. U.S. EPA will oversee the investigation and cleanup of subsurface soil and ground water contamination. U.S. EPA and DTSC developed a joint two-phased strategy that clearly separates yet synchronizes the facility closure with the site cleanup. In Phase 1, the aboveground hazardous waste management units are closed and removed. Phase 2 work will begin with a subsurface investigation followed by development of a cleanup plan. The two-phased strategy is further described in Section 5, Final Remedy for Soil and Ground Water Contamination, of this Final Remedy Decision.

U.S. EPA has selected the final remedy for the former Romic facility based on public input, new information, and further analysis. Based on all the information available to date, U.S. EPA believes that the final remedy is protective of human health and the environment and has the best chance of attaining the media cleanup objectives. It is also effective at remediating source areas, limiting off-site migration of volatile organic compounds from the source areas and limiting the potential for vapor intrusion into structures. The selected remedy will be implemented through a 1988 U.S. EPA corrective action consent order.

#### 2. Introduction

This Final Remedy Decision presents U.S. EPA=s remedy to address soil and ground water contamination at the former Romic facility. It contains background information, a discussion of how the final remedy differs from the proposal contained in the September 2007 Statement of Basis, a description of the final remedy and how it will be implemented, final media cleanup objectives, remedy performance standards and U.S. EPA's response to the public comments on the proposed cleanup plan.

This Final Remedy Decision is organized into the following sections:

- Section 1. Executive Summary
- Section 2. Introduction
- Section 3. Final Remedy Decision and Public Comments
- Section 4. Summary of Site Background, Environmental Setting and Extent of Contamination
- Section 5. Final Remedy for Soil and Ground Water Contamination
- Section 6. Media Cleanup Objectives
- Section 7. Remedy Performance Standards
- Section 8. Implementation of Final Remedy
- Section 9. Regulatory Authority of Other Agencies
- Section 10. U.S. Environmental Protection Agency Concurrence

Section 11. Reference Documents

#### 3. Final Remedy Decision and Public Comments

This section discusses the public comments U.S. EPA received on the proposed remedy, changes that were made to the proposed remedy as a result of the public comments and the community involvement activities that are part of the U.S. EPA response to the public comments.

3.1 Public Comments on the Proposed Remedy

On September 17, 2007, U.S. EPA began a 45-day public comment period during which it solicited comments on its proposed remedy to address soil and ground water contamination at the former Romic facility. The proposed remedy was documented in U.S. EPA's September 2007 Statement of Basis. The comment period closed on November 1, 2007.

U.S. EPA conducted a public meeting and hearing on October 10, 2007 in East Palo Alto, California. Approximately 35 people attended the public meeting and hearing. U.S. EPA received verbal comments from 14 individuals and written comments from two people during the public hearing portion of the meeting. A court reporter recorded the verbal comments and prepared a transcript. In addition, U.S. EPA received written comments through both electronic and U.S. Postal Service mail. U.S. EPA received a total of 139 public comments from 19 individuals and organizations on the proposed remedy. Appendix A of this Final Remedy Decision contains U.S. EPA's response to the public comments.

U.S. EPA has selected the final remedy for the former Romic facility based on public input, new information, and further analysis. The Agency considered the public comments it received on the September 2007 Statement of Basis during the public comment period and other new information it received such as additional ground water monitoring data.

The administrative record contains all of the documents, correspondence, data, and other information U.S. EPA considered in making the final remedy decision. The reference documents, which U.S. EPA used to prepare this Final Remedy Decision, are listed in Section 11. The reference documents along with a list of all items in the administrative record are available for public review at the East Palo Alto Public Library located at 2415 University Avenue, East

Palo Alto, California 94303. Hard copies of the full administrative record are available for public review at the U.S. EPA office, located at 75 Hawthorne Street, San Francisco, California 94105.

#### 3.2 Differences Between the Proposed and Final Remedy

In response to public comments on the September 2007 Statement of Basis, U.S. EPA modified the proposed cleanup plan by adding two new requirements into the final remedy. The new requirements include: (1) a site wide subsurface investigation of the former facility that will take place after closure is completed, and (2) use of clean diesel technologies, clean fuels and/or clean construction practices for diesel powered construction equipment (greater than 25 horsepower) that will be used in the site cleanup.

#### Site Wide Subsurface Investigation

U.S. EPA is requiring that Romic conduct a site wide subsurface investigation after closure and removal of all aboveground permitted hazardous waste management units at the former facility. This investigation will identify the nature and extent of contamination across the site, including beneath the process plant and other areas that were previously inaccessible. Romic will use this information in conjunction with this Final Remedy Decision to develop a plan for implementing the final remedy. This plan, called a Corrective Measures Implementation Plan or CMIP, will describe the approach and details of how the facility will be cleaned up.

#### Mitigation of Diesel Particulate Emissions from Construction Equipment

To address the potential health risks associated with diesel exhaust during the site cleanup, U.S. EPA is requiring that Romic take actions to mitigate emissions from diesel powered engines (greater than 25 horsepower) used in the cleanup of the former facility. The new requirement, "Actions to Mitigate the Effects of Diesel Particulate Emissions from Construction Equipment", is described below.

Romic will determine, subject to U.S. EPA review and approval, the level of such diesel mitigation on a case-by-case basis for earth movement, drilling, and transportation activities at the site.

Mitigation may include:

(1) the highest level of verified diesel technologies be installed on off-road and on-road diesel powered equipment, such as diesel particulate filters and diesel oxidation catalysts. Such controls will be required for off-road equipment by the California Air Resources Board's (CARB's) Final Regulation Order for In-Use Off-Road Diesel Vehicles beginning in 2009 which applies, in part, to the rental sector which may own such equipment,

(2) idling of construction equipment, trucks and vehicles be limited to five minutes or less,

(3) engines be tuned to manufacturers' specifications,

(4) ultra low sulfur diesel and/or another clean fuel be used in off-road and on-road diesel equipment,

(5) trucks meet emission standards, and

(6) a plan be developed and implemented to limit truck traffic through the community.

In addition, for drilling applications which require portable engines, at least Tier 2 engines will be required if feasible. Tier 2 engine standards for off-road engines are a series of emission standards for engines constructed between the years of 2001 and 2006.

3.3 Community Involvement

The U.S. EPA response to public comments discusses community involvement activities associated with different parts of the Final Remedy Decision. Community involvement for Land Use Restrictions and petitions to cease or reduce active treatment, make contingency changes to the final remedy (see Section 5.2) and/or make significant adjustments to the remedy implementation are all discussed in the response to comments.

The community involvement activities discussed in the response to comments are summarized below:

(1) Using fact sheets, notices, emails or other appropriate means to notify the community of important activities related to the Romic cleanup;

(2) Consultations with the City of East Palo Alto regarding significant issues such as petitions from Romic to cease or reduce enhanced biological treatment;

(3) Make workplans and other key documents available for public review;

(4) Have small informal group meetings as appropriate to discuss important issues if there is sufficient interest from the community for such a gathering.

The complete text of U.S. EPA's discussion of community involvement activities is contained in Appendix A, U.S. EPA Response to Public Comments, Response to Comments 11.16 and 11.17, Response to Comment 16.2 and Response to Comments 10.1, 10.2, 10.3, 10.4, and 10.5.

#### 4. Summary of Site Background, Environmental Setting and Extent of Contamination

The following is a summary of site background, environmental setting and the extent of contamination. For additional detail on these areas, please refer to the September 2007 Statement of Basis.

#### 4.1 Site Background

Romic was a 12.6 acre hazardous waste management facility located at the east end of Bay Road in East Palo Alto, California (see Figure 1). This area of East Palo Alto is zoned for light and heavy industrial use. The nearest residential neighborhood is approximately 1250 feet (0.25 miles) to the west of the former facility. Historical facility operations included solvent recycling, fuel blending, wastewater treatment, and hazardous waste storage and treatment. Waste management practices dating back to the 1950s resulted in the contamination of soil and ground water beneath the former facility.

4.2. Environmental Setting

The geology beneath the site is comprised of sand, silt and clay layers that have been

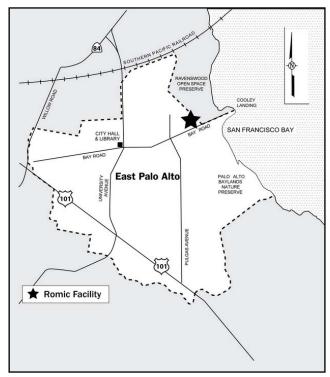


Figure 1 Site Location Map

subdivided into aquifer and aquitard units. Aquifers typically contain permeable sand and gravel zones; aquitards contain mostly clay layers, which are not as permeable as the sand/gravel aquifers. The units have been designated A, B, C, and D from shallowest to deepest. First contact with ground water is at a depth of about 3 to 8 feet below ground surface. Ground water in all zones flows east toward San Francisco Bay. Ground water is brackish (salty) and unsuitable as a drinking water source. The City of East Palo Alto does not use ground water near the Romic facility. The municipal water supply is largely derived from the San Francisco Hetch Hetchy Reservoir system.

Surface water resources near the former Romic facility include two connected tidal channels (sloughs) and adjacent wetland. To the east, the former facility is bordered by a narrow tidal channel (east slough) which drains to San Francisco Bay. A former salt evaporation pond, which has been reclaimed as a wetland, is located between the slough and San Francisco Bay. Immediately north of the former facility, another channel (north slough) drains into the eastern tidal slough. The north slough is a discharge point for East Palo Alto storm water runoff, drains to the east slough, adjacent to Romic. The former facility is within the 100-year flood plain zone, but it is protected by a levee. No major stream channels are located near the site, except the two artificially created tidal sloughs.

#### 4.3. Extent of Contamination

Soil and ground water beneath the former Romic facility are contaminated with hazardous constituents. The primary contaminants in the soil and ground water are volatile organic compounds or VOCs. Typical VOCs include dry cleaning chemicals, carburetor cleaning

liquids, paint thinners, and chemicals used to manufacture computers. Ground water contamination extends across most of the former facility to a depth of at least 80 feet below ground surface.

Dense Non-Aqueous Phase Liquids (DNAPLs) are believed to be present below the contamination source areas (i.e., central processing area, former ponds, and drum storage areas). A DNAPL is a liquid that is denser than water and does not dissolve or mix easily in water (it is immiscible). In the presence of water DNAPLs form a separate phase from the water. Many chlorinated solvents, such as trichlorethene (TCE), may be present at a hazardous waste site as a DNAPL and/or mixed with water (i.e., dissolved phase). DNAPLs are rarely found as a separate phase in monitoring wells, but their presence at a site can be inferred by site history, ground water contaminant concentrations, and contaminant trend analysis.

Ground water monitoring wells at Romic have been sampled for semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and dioxins/furans. SVOCs and metals have been detected in a few wells at concentrations which do not suggest a risk to receptors. Based on laboratory analytical results, dioxins and furans have not been detected in ground water at the former facility.

PCBs were detected in oily and sediment-entrained ground water samples, but have not been detected in any sediment-free ground water samples. PCBs are relatively immobile in ground water and unlikely to migrate to the slough.

VOCs have been detected in the surface water of the sloughs located to the north and east of former facility. Concentrations of VOCs in the surface water currently do not exceed the surface water cleanup objectives. The surface water is monitored on a quarterly basis.

The contamination came from past releases of hazardous wastes (e.g., spent solvents) and/or hazardous constituents from the central processing area, former drum storage areas and former wastewater receiving ponds. These releases have occurred as a result of accidental spills, tank and container overfills, flooding events, and breaks in pipes. In addition, a trough connecting the central process area and the former wastewater receiving ponds also may have acted as a source of contamination.

One documented release to the environment occurred during the winter season of 1972-1973 when tidal flooding breached the levees resulting in discharge from the ponds to the sloughs. The California Regional Quality Control Board issued a Cleanup and Abatement Order on March 23, 1973, which estimated a release of approximately 20,000 gallons per day of waste liquids from the former east pond to the adjacent slough. As a result of the Order, Romic rebuilt levees, improved surface drainage, and connected to the sanitary sewer.

#### 5. Final Remedy for Soil and Ground Water Contamination

The final remedy includes a site wide subsurface investigation; ground water and soil remediation; ground water and surface water monitoring; financial assurance for construction, operation, monitoring and maintenance of the ground water and soil remediation system; land

use restrictions with a risk management plan; five-year remedy performance evaluation reports; and progress reports. The final remedy also includes contingency measures as discussed in Section 5.2 of this Final Remedy Decision.

The former Romic facility is undergoing closure. Regulatory oversight of facility closure is the responsibility of DTSC. The U.S. EPA will oversee the investigation and cleanup of subsurface soil and ground water contamination. U.S. EPA and DTSC developed a joint two-phased strategy for the facility closure and site cleanup In Phase 1, the closure plan addresses Decontamination, Disassembly and Disposal (DD&D) of the aboveground hazardous waste management units (i.e. tanks, distillation towers). Once the Phase 1 DD&D work is completed, Phase 2 work will begin with a site wide subsurface investigation which will further assess the nature and extent of contamination beneath the former facility. Romic will then submit a Corrective Measures Implementation Plan or CMIP that details the cleanup work that will take place at the former facility. The CMIP will be developed using the requirements of the Final Remedy Decision and from information gathered during the site wide subsurface investigation. The CMIP will specify the cleanup approaches such as treatment and/or excavation for different areas of the former facility.

U.S. EPA will require that Romic monitor and mitigate vapor emissions from cleanup work such as excavation of contaminated soils. Romic will prepare Health and Safety plans that contain requirements to protect on-site workers during the investigation and cleanup effort. In addition, to address the potential health risks associated with diesel exhaust during the site cleanup, U.S. EPA is requiring that Romic use clean diesel technologies, clean fuels and/or clean construction practices on diesel powered engines greater than 25 horsepower. The CMIP will include such requirements for construction equipment that will be used during the site cleanup.

The facility is not operating and is undergoing closure. The potential health impacts from further investigation and cleanup of the former facility are temporary and will be mitigated.

### 5.1 Final Remedy

<u>Site Wide Subsurface Investigation</u> - The site wide subsurface investigation will take place after the removal of above ground permitted hazardous waste management units during closure of the former facility. The investigation will cover the entire facility including areas that were formerly inaccessible (e.g., former ponds areas, central processing area, and former drum storage areas). The purpose of the investigation is to further assess the nature and extent of contamination such that a cleanup plan can be developed. The data collected during the site wide subsurface investigation will meet the needs of both the facility closure and site cleanup.

<u>Soil and Ground Water Remediation</u> - The final remedy to address soil and ground water contamination involves the use of enhanced biological treatment, monitored natural attenuation, and excavation and removal of contaminated soils. In addition, Romic will continue to maintain the existing site cover or cap.

Enhanced biological treatment involves enhancing a natural process that is already occurring in the ground water beneath the site. Romic tested the enhanced biological treatment approach in

the field and demonstrated its effectiveness at reducing contaminant concentrations in ground water. With U.S. EPA's approval, Romic expanded the test locations and is currently using biological treatment at several areas at the former facility. The enhanced biological treatment approach involves injecting a mixture of cheese whey, molasses and water into the solvent contaminated soil and ground water. Cheese whey is the watery part of milk that is separated from the curd in the process of making cheese. The cheese whey and molasses act as a food source for natural microbes that live in the subsurface. These microbes breakdown the solvents, cheese whey, and molasses into carbon dioxide, water and salt. All soils at the site below a depth of about 3 to 8 feet are saturated with water. Since saturated soils and ground water are closely linked, any remediation of the ground water will also benefit the saturated soils.

Enhanced biological treatment will be used together with monitored natural attenuation (MNA) to cleanup the soil and ground water. Enhanced biological treatment will first be used to significantly reduce contaminant concentrations and be followed-up with the MNA until the media cleanup objectives are achieved. MNA allows natural processes to reduce contamination in soil and ground water. These processes include biodegradation, dispersion, dilution, sorption, and volatilization. Implementation of monitored natural attenuation typically involves continued monitoring of contaminant concentrations to quantify attenuation rates and progress toward meeting the media cleanup objectives

In general, U.S. EPA will use the following guiding principles to determine when MNA becomes an appropriate remedial approach:

- Ground water contaminant concentrations in the given area should be reasonably close to their corresponding media cleanup objectives.
- Contaminant concentrations in the ground water should either be decreasing or maintaining a stable level.

Soil excavation and removal will be directed to areas of the former facility where it is more practical to remove rather than treat the contaminated soils. The size of the areas to be excavated will be determined after the currently inaccessible areas are investigated.

The proposed remedy requires that the existing concrete-asphalt cap be maintained to prevent direct contact with any contaminated soils. If in the future, removal of any cover material becomes necessary to facilitate closure and/or cleanup of the former facility, new asphalt-concrete or other appropriate material will be installed in the affected area if needed.

<u>Ground Water and Surface Water Monitoring</u> - Romic currently has a ground water and surface water monitoring plan that was finalized on April 24, 2003. U.S. EPA approved the plan on May 21, 2003. Approximately 56 ground water monitoring wells and surface water locations in the adjacent slough are sampled on a periodic basis (once, twice or four times per year). The monitoring plan will be revised to ensure consistency with the soil and ground water remedy.

<u>Financial Assurance</u> - The cost estimate for the final remedy is \$2.5 million. Under the U.S. EPA Remedy Decision, Romic is required to pay for the cleanup of the former facility and, in

addition, set aside funding equivalent to another \$2.5 million as financial assurance (surety bond). Should Romic default on its obligation to address the contamination, U.S. EPA would use the money set aside as financial assurance to complete the cleanup at the former facility.

Financial assurance is required for monitoring, construction, and operation and maintenance of the final remedy. Romic has set aside money to assure that the required remediation work will be completed now and in the future. In June 2007 Romic established an interim financial assurance mechanism for remediation of the former facility. This mechanism is a surety bond for \$1.5 million. The cost estimate for the final remedy as discussed in the September 2007 Statement of Basis is \$2.5 million. Within 60 days after Romic receives written notice of this Final Remedy Decision, Romic will be required to increase the amount of the existing surety bond or obtain another mechanism with a combined value of \$2.5 million.

The financial assurance mechanism will stay in place or be adjusted based on a determination from U.S. EPA. The first step in the process requires Romic to prepare a petition to U.S. EPA requesting that the level of financial assurance be reduced based on the work completed. The petition will document Romic's rationale for making the request.

U.S. EPA will then evaluate the petition and coordinate with the other involved agencies. In general, U.S. EPA will use the following guiding principles to evaluate Romic's petition and make a determination:

- The level of financial assurance should be consistent with the anticipated costs of future monitoring, operation and maintenance, and/or remediation work that still needs to be completed.
- The level of financial assurance for operation and maintenance of remediation systems should be maintained for sometime after the system or portions of the system are shutdown to allow sufficient time to evaluate potential rebound effects. For example, financial assurance for the enhanced biological treatment of contaminated ground water and soil at Romic should remain in place for sometime after the treatment system or portions of the system have been shutdown. During this time, ground water monitoring data will be used to assess whether contaminant concentrations are increasing or decreasing. If contaminant concentrations show an increasing trend after system shutdown, then further enhanced biological treatment will be needed.

<u>Land Use Restrictions</u> - In light of the extent of soil and ground water contamination at the Romic facility, the final remedy requires that restrictions be imposed on future land use activities. The restrictions are necessary to protect human health and the environment, and to maintain the short and long term protectiveness of the remedy. The restrictions will be imposed through a "Covenant to Restrict Use of Property" (Covenant) which is an enforceable institutional control mechanism. The Covenant restrictions "run with the land" and apply no matter who owns the property. The land use restrictions may, with regulatory agency approval, be revised if site conditions should change in the future (e.g., new land use).

Development of the specific language for the Covenant will begin after U.S. EPA notifies Romic of the Final Remedy Decision. The Covenant restrictions specify that U.S. EPA or DTSC can approve an RMP, U.S. EPA and DTSC are both parties to the Covenant and as such have authority to approve certain required documents. The language of the Covenant will include a discussion of agency responsibilities.

The following is a summary of the land use restrictions that will be included in the Covenant:

- Use of the property is restricted to commercial and industrial purposes only.
- The property shall not be used for any of the following purposes:
  - A residence for human habitation, including any mobile home or factory-built housing
  - A hospital or hospice
  - A public or private school for persons under 21 years of age
  - A day care center for children or day care center for Senior Citizens
- The following activities shall not be conducted at the property:
  - Animal husbandry (i.e,.raising cattle, pigs, sheep)
  - Growing food crops or any agricultural products
  - Installation of wells for the production of oil, gas or drinking water
  - Extraction of ground water for purposes other than ground water monitoring, site remediation or construction dewatering
  - Any activity that may disturb or adversely affect the operation and maintenance of the ground water monitoring network and site remediation system that is not part of a U.S. EPA or California EPA, Department of Toxic Substances Control (DTSC) approved corrective action workplan or facility closure plan for the property without written approval from U.S. EPA or DTSC.
  - Any activity that may disturb or adversely affect the integrity of the paved/concrete facility cover that is not part of a U.S. EPA or DTSC approved corrective action workplan or facility closure plan for the property without written approval from U.S. EPA or DTSC.
  - Any redevelopment of the property until a Risk Management Plan (RMP) is prepared for the specific project and is approved in writing by U.S. EPA or DTSC. A RMP identifies, at a minimum, the specific project proposed for construction, the previous site history, the nature and extent of contamination from all media, the potential pathways of receptor exposure and health impacts

from existing site contamination, and practical ways to mitigate the impacts for the specific project. The Covenant and the RMP work together to ensure that potential impacts from exposure to contaminated soils, ground water or other media are managed in a manner that is protective of human health and the environment. The RMP may be revised or amended. Any RMP or amended RMP approved in writing by U.S. EPA or DTSC is incorporated by reference into this Covenant and supersedes any existing RMP

- The activities specified below shall not be conducted on the property unless the following conditions are satisfied:
  - Any activities that will disturb the soil or ground water, such as excavation, grading, removal, trenching, filling, earth moving or mining, shall only be permitted on the property pursuant to a corrective action work plan or facility closure plan approved in writing by U.S. EPA or DTSC, or an RMP approved in writing by U.S. EPA or DTSC.
  - Any contaminated media brought to the surface by grading, excavation, trenching, or backfilling shall be managed in accordance with all applicable provisions of local, state and federal regulations.

<u>Five Year Remedy Performance Evaluation Reports</u> - The purpose of these reports is to provide an evaluation of the long-term effectiveness and reliability of the remedy including enhanced biological treatment and MNA with recommendations for improvement. The report, which is submitted every 5 years, examines such questions as: Are the media cleanup objectives and remedy performance standards being achieved? How well are things working? Are contaminant concentrations levels trending downward? What improvements are necessary and how will they be implemented? The first report is due fives years from the date U.S. EPA approves the CMIP.

<u>Progress Reports</u> - Progress reports are being required to update U.S. EPA, the community and other regulatory agencies on the status of the investigation and remediation activities at the former facility. The number of progress reports could vary over time. U.S. EPA will determine the frequency of progress reporting based on site specific conditions. To begin the process, U.S. EPA is requiring that Romic initially submit progress reports every three months. The first progress report is due 90 calendar days from the date DTSC approves the facility Closure Plan.

5.2 Remedy Contingencies

The final remedy contains the following contingencies:

<u>Demonstration of System Performance</u>: Romic will hydraulically and chemically monitor the performance of the remediation system. If monitoring data indicates that the system is not meeting the five remedy performance standards as described in Section 7, Remedy Performance Standards of this Final Remedy Decision, modifications to the remedy will be required. Such

modifications include, but are not limited to, the following: installation of additional injection or monitoring wells, modifications to the injection technology, or modifications to the well design.

Excavation and Removal of Contaminated Soil: The proposed remedy includes excavation and removal of approximately 3,072 cubic yards of contaminated soils from the former facility. However, several areas at the site are currently inaccessible and will be investigated following facility closure and removal of aboveground permitted hazardous waste management units. The size of the excavation will be determined based on investigation results. U.S. EPA reserves the right to require excavation and removal as necessary to meet the remedy performance standards as described in Section 7, Remedy Performance Standards of this Final Remedy Decision. Alternatively, Romic may petition U.S. EPA for permission to excavate and remove contaminated soils as necessary to meet the remedy performance. U.S. will evaluate and decide whether to approve Romic's petition at that time.

<u>Treatment of Excavated Soil</u>: After excavation, any contaminated soil shall be managed in accordance with all applicable provisions of state and federal laws.

<u>Other New Information that Changes Current Conditions</u>: If new information becomes available, or significant environmental changes occur on or off-site, additional remedial measures may be required. U.S. EPA reserves its right to modify the soil and ground water remedy as necessary to ensure that the remedy performance standards (including media cleanup objectives) are met. If significant changes to the final remedy are necessary, these will be required through modification of this Final Remedy Decision.

#### 6. Media Cleanup Objectives

U.S. EPA has selected one cleanup objective for ground water, one objective for surface water and one objective for indoor air vapor intrusion for future redevelopment. These cleanup objectives are based on protection of human health and the environment. Each of the media cleanup objectives are discussed below along with the compliance points (where cleanup levels should be achieved) and a timeframe goal for meeting the objectives (time to implement the remedy and achieve cleanup levels at the point of compliance). Table 1 lists the final media cleanup objectives for 24 of the 26 volatile organic compounds known to be present at the former facility. There are currently no published screening levels available for 1,1 - dichloropropene and isopropyl benzene. If screening levels for these two compounds are developed in the future, they will be incorporated by reference into this Final Remedy Decision as media cleanup objectives.

The media cleanup objectives for ground water and surface water are taken from "Screening for Environmental Concerns at Sites with Contaminated Soil and Ground water, California Regional Water Quality Control Board, San Francisco Bay, Interim Final, February 2005" (Environmental Screening Levels), Table F-1a, Ceiling Value (Taste & Odor) and Drinking Water (Toxicity), and Table F, Estuarine Screening Levels. The media cleanup objectives for indoor air vapor intrusion are taken from the U.S. EPA Region 9 Preliminary Remediation Goal Table, October 2004 (PRGs). Should the U.S. EPA at some time in the future revise the PRGs used for the cleanup objectives in this Final Remedy Decision, the most current PRGs available at the time of redevelopment shall apply to the former Romic facility and be incorporated by reference into the Final Remedy Decision. If additional contaminants are identified at the former facility that are not listed on Table 1, applicable screening levels from the above cited documents as amended shall apply to the Romic facility and be incorporated by reference into this Final Remedy Decision. To the extent that this part of the Final Remedy Decision is inconsistent with the documents cited above, the above cited documents shall control.

6.1 Final Cleanup Objectives

<u>Ground Water</u> - Maximum Contaminant Levels (MCLs) for drinking water are the site-wide media cleanup objectives for all ground water zones (A,B,C and D) (Table 1). The ground water media cleanup objectives are the lowest of the California EPA Primary MCLs for drinking water based on toxicity and Secondary MCLs based on taste and odor. U.S. EPA PRGs are used when there are no MCLs available for a given contaminant.

The final remedy is intended to eventually reduce contaminant concentrations in the impacted ground water to concentrations equal to or below the media cleanup objectives. The compliance point for this objective is the ground water in Zones A, B, C and D.

The MCLs are both protective of human health and the environment and feasible for long-term property re-use. The proposed MCLs are all lower than the screening levels for vapor intrusion found in the RWQCB Environmental Screening Levels (Table E-1a) referenced above using the most conservative assumptions (residential land use scenario and high permeability vadose zone soil type). The screening levels for vapor intrusion address the ground water to indoor air pathway.

Ground water at former facility is salty due to the close proximity to the San Francisco Bay. Thus, the ground water at the former facility is not currently being used as a drinking water supply and is not likely to be used for this purpose in the future. The majority of drinking water supplied to East Palo Alto residents and businesses is provided by the San Francisco Hetch Hetchy system, which originates in the Sierra Nevada Mountains.

<u>Surface Water Estuarine Screening Level</u> - This media cleanup objective applies to surface water in the sloughs near the Facility. The estuarine screening levels are derived from various regulatory sources (e.g., California Toxics Rule, Criterion for Continuous Concentration) and generally represent the most stringent of available action levels for aquatic habitat protection. They are designed to be protective of both human health and the environment by accounting for potential bioaccumulation of chemicals in aquatic organisms and subsequent human consumption of these organisms. Locally, the areas south of the Dumbarton Bridge are considered to be estuarine.

<u>Indoor Air Vapor Intrusion Objective for Future Redevelopment</u> - Any future redevelopment of the former facility property will need to meet U.S. EPA's risk-based concentrations for vapor intrusion. Specifically, the ambient air goals included in the U.S. EPA Region 9 PRGs (October

Contaminant	Ground Water Cleanup Objective <sup>1</sup>	Surface Water Cleanup Objective <sup>2</sup>	Indoor Air Vapor Intrusion Objective <sup>3</sup>		
	(ug/L)	(ug/L)	(ug/m³)		
Benzene	1	46	0.25		
Chlorobenzene	50	25	62		
Chloroethane	12	12	2.3		
Chloroform	70	470	0.083		
Dichlorobenzene, 1,2-	10	10	210		
Dichloroethane, 1,1-	5	47	520		
Dichloroethane, 1,2-	0.5	99	0.074		
Dichloroethene, 1,1-	6	3.2	210		
Dichloroethene, cis-1,2-	6	590	37		
Dichloroethene, trans-1,2-	10	260	73		
Dichloropropene, 1,1-	NA	NA	NA		
Ethylbenzene	30	30	1100		
Freon 113	59000 <sup>3</sup>	NA	31000		
Isopropyl benzene	NA	NA	NA		
Methylene Chloride	5	1600	4.1		
MTBE	5	180	7.4		
Tetrachloroethene (PCE)	5	8.9	0.32		
Tetrahydrofuran	1.6 <sup>3</sup>	NA	0.99		
Toluene	40	40	400		
Trichloroethane, 1,1,1-	200	62	2300		
Trichloroethane, 1,1,2-	5	42	0.12		
Trichloroethene (TCE)	5	81	0.017		
Trimethylbenzene, 1,2,4-	12 <sup>3</sup>	NA	6.2		
Trimethylbenzene, 1,3,5-	12 <sup>3</sup>	NA	6.2		
Vinyl Chloride	0.5	530	0.11		
Xylenes (Total)	20	100	110		

#### Table 1 - Final Media Cleanup Objectives for Romic East Palo Alto

- "Screening for Environmental Concerns at Sites with Contaminated Soil and Ground water, California Regional Water Quality Control Board, San Francisco Bay, Interim Final, February 2005" (Environmental Screening Levels), Table F-1a, Ceiling Value (Taste & Odor) and Drinking Water (Toxicity)
- 2. See 1 above, Table F, Estuarine Screening Levels
- 3. US EPA Preliminary Remediation Goals (PRGs) October 2004
- ug/L micrograms per liter
- ug/m<sup>3</sup> micrograms per cubic meter
- NA Not Available

2004 and any future revisions in effect at the time of redevelopment) will need to be met in any existing structures that remain in place or new structures built on the property as part of a redevelopment project.

The PRG table lists the one in one million  $(10^{-6})$  excess cancer risk concentrations and hazard index concentrations equivalent to 1 for non-carcinogenic compounds. Table 1 lists the PRG ambient air goals for the 26 VOCs present at the former facility. Although U.S. EPA generally allows a risk range of 1 in 10,000 ( $10^{-4}$ ) to 1 in 1,000,000 ( $10^{-6}$ ), we feel that using a ( $10^{-6}$ ) value is protective because there are multiple volatile organic compounds present at the site, and the PRG table is not considerate of cumulative effects of exposure to multiple chemicals.

### 6.2 Timeframe Goal for Meeting the Cleanup Objectives

The proposed goal for meeting the media cleanup objectives is seven years after closure of the former facility is completed. The timing is based on completion of closure because most contaminated soils (contaminant source areas) are not currently accessible to investigation and remediation. Many of these areas are covered by buildings, tanks, and the process plant which were used when the facility was operational.

The former Romic facility is undergoing closure. The aboveground permitted hazardous waste management units will be removed during the closure process. Once these units have been removed, a site wide investigation will be conducted to further assess the nature and extent of contamination beneath the former facility. Romic will then submit a cleanup plan called a Corrective Measures Implementation Plan or CMIP that details the cleanup work that will take place. This approach is part a joint two phase strategy developed by U.S. EPA and DTSC that clearly separates yet synchronizes the facility closure with the site cleanup.

## 6.3 Achievement of Media Cleanup Objectives

Romic may petition U.S. EPA to cease or reduce active treatment when it believes that the cleanup objectives have been partially or completely achieved in all or part of the former facility. The petition must include a rationale, data and other information that supports Romic's request. U.S. EPA will evaluate Romic's petition and determine if it is acceptable at that time. U.S. EPA will keep the community informed about any petitions to cease or reduce active treatment (see Section 3.3 of this Final Remedy Decision).

## 7. Remedy Performance Standards

The final soil and ground water remedy for the former Romic facility must achieve the following remedy performance standards:

<u>Protect Human Health and the Environment</u>. Protection of human health and the environment is the general mandate from the RCRA statute and is thus included as the first performance standard.

<u>Attain Media Cleanup Objectives</u>. The cleanup objectives address media cleanup levels (chemical concentrations) and points of compliance (where cleanup levels should be achieved). Cleanup levels for any medium (e.g., soil, ground water) are set at levels that are protective of human health and the environment. They are also based on appropriate assumptions regarding current and reasonably anticipated land use(s) and current and potential beneficial uses of water resources. See Section 6, Media Cleanup Objectives, of this Final Remedy Decision for the media cleanup objectives selected for the former Romic facility.

<u>Remediate the Sources of Releases</u>. Remediate the sources of releases so as to eliminate or reduce further releases of hazardous wastes or hazardous constituents that may pose a threat to human health and the environment. U.S. EPA believes that treatment should be used to address principal threats posed by a site whenever practicable and cost-effective. "Sources" includes both the location of the original release as well as locations where significant mass of contaminants may have migrated. Note that while U.S. EPA expects facilities to use treatment technologies to address principal threats, U.S. EPA also expects that containment technologies as well as institutional controls can be used to address wastes that pose relatively low long-term threats.

### Limit Off-site Migration of Contaminated Ground Water

This performance standard considers how effectively a remedy alternative limits the off-site migration of contaminated ground water. Ground water contaminated with VOCs is migrating off-site from the Romic facility to the northeast toward San Francisco Bay. Interim remedial measures using enhanced biological treatment are currently being used along the downgradient boundary of the facility to partially limit off-site migration.

## Limit Potential for Vapor Intrusion into Structures

This performance standard considers how effectively a remedy alternative limits vapor intrusion from contaminated subsurface media into structures. Vapor intrusion is the migration of chemical vapors, primarily volatile organic compounds, from the subsurface into indoor air. Vapor intrusion occurs due to the pressure and concentration differentials between indoor and outdoor air. Indoor environments are often negatively pressurized with respect to outdoor air. This pressure difference allows subsurface vapors to preferentially migrate into indoor air. Contaminated subsurface matrices may include ground water, soil or soil gas. Contaminants of concern typically include halogenated VOCs such as TCE, tetrachloroethene (PCE), and vinyl chloride, but may also include aromatic VOCs such as benzene, toluene and xylenes. Vapor intrusion has been identified as an important exposure pathway at many contaminated sites, including Superfund, RCRA, and Brownfield sites.

## 8. Implementation of the Final Remedy

U.S. EPA is selecting this remedy under the authority of the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendment of 1984. In 1988, Romic entered into a RCRA 3008(h) Administrative Order on Consent (Consent Order) with U.S. EPA that required Romic to perform a RCRA Facility Investigation (RFI), develop a Corrective Measures Study (CMS) to evaluate remedial options, and implement a remedy selected by U.S. EPA to correct past releases to the environment from the former facility.

The final remedy for soil and ground water contamination will be implemented through the Consent Order. This Final Remedy Decision is hereby incorporated by reference into the Consent Order. As such, this Final Remedy Decision is enforceable under the provisions of the Consent Order. Romic is thus subject to stipulated penalties and the other provisions of the Consent Order.

#### 9. Regulatory Authority of Other Agencies

U.S. EPA has selected a final remedy for contaminated soils and ground water at the former Romic facility under RCRA, as amended. The final remedy does not prevent DTSC, RWQCB or other relevant regulatory agencies in the state of California from enforcing their regulations and statutes at the former facility.

Implementation of the final remedy for the former Romic facility must be in compliance with all applicable state, federal and local regulations. The parties implementing the final remedy are responsible for obtaining all necessary and applicable State, federal and local permits.

#### 10. U.S. Environmental Protection Agency Concurrence

The proposed remedy Alternative 3 (Enhanced Biological Treatment) in the September 2007 Statement of Basis, as modified herein based on public comments, new information and further analysis, is hereby selected as the final soil and ground water remedy for the former Romic facility. Based on all the information available to date, U.S. EPA believes that the final remedy is protective of human health and the environment and has the best chance of attaining the cleanup objectives. It is also effective at remediating source areas, limiting off-site migration of volatile organic compounds from the source areas and limiting the potential for vapor intrusion into structures.

In addition, the final remedy using enhanced biological treatment with cheese whey and molasses is environmentally friendly (green). This is because it uses less energy and therefore produces less green house gas emissions than the ground water extraction and treatment alternative.

Jeff Scott, Director Waste Management Division U.S. EPA Region 9

Date: 7 296 08

#### **11. Reference Documents**

Key documents used as a reference in preparing this Final Remedy Decision are listed below:

Alvarez, Alvaro, Youth United for Community Action. 2007. Letter to Ronald Leach, Project Manager, U.S. EPA, Comments on U.S. EPA's proposed soil and ground water remedy for Romic East Palo Alto facility. October 24.

ARCADIS 2008. Third and Fourth Quarter 2007 Semiannual Report, Romic Environmental Technologies Corporation, 2081 Bay Road, East Palo Alto, California. February 13.

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\_\_\_\_\_ 2005a. Screening for Environmental Concerns at Sites with Contaminated Soil and Ground water, Volume 2: Background Documentation for the Development of Tier 1 Environmental Screening Levels. February.

Cruz, Miriam, Youth United for Community Action. 2007. Letter to Ronald Leach, Project Manager, U.S. EPA, comments on U.S. EPA's proposed soil and ground water remedy for Romic East Palo Alto facility. October 22.

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ENVIRON 1999. RFI Support: Risk Assessment from Recreational Visitors (Appendix G of Conor Pacific/EFW and Henshaw Associates, 1999 report). Letter- Report to Julia Bussey, Romic Environmental Technologies Corporation. March 31.

Esquire Deposition Services. 2008. Official Transcript of U.S. EPA's October 10, 2007 Public Hearing, Proposed Cleanup Plan for Soil and Ground Water Contamination at the Romic Environmental Technologies Corporation Facility, East Palo Alto, California.

Evans, Keisha A. and Saundra Webster, Youth United for Community Action, Ujima Security Council, Environmental Justice Group of East Palo Alto. 2007. Letter to Ronald Leach, Project Manager, U.S. EPA, comments on U.S. EPA's proposed soil and ground water remedy for Romic East Palo Alto facility. October 31.

Harding Lawson Associates 1991. Risk Assessment for the Tidal Slough, Romic Chemical Corporation, East Palo Alto. April 2.

James, Alvin, City Manager, City of East Palo Alto, 2007. Letter to Ronald Leach, Project Manager, U.S. EPA, comments on U.S. EPA's proposed soil and ground water remedy for Romic East Palo Alto facility. October 26.

Mena, Gabriel, Youth United for Community Action. 2007. Letter to Ronald Leach, Project Manager, U.S. EPA, comments on U.S. EPA's proposed soil and ground water remedy for Romic East Palo Alto facility. October 23.

Naranjo, Brenda, Resident, East Palo Alto, California. 2007. Letter to Ronald Leach, Project Manager, U.S. EPA, comments on U.S. EPA's proposed soil and ground water remedy for Romic East Palo Alto facility. October 24.

Romero, Carlos, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from planning commission). 2007. Email to Ronald Leach, Project Manager, U.S. EPA, comments on U.S. EPA's proposed soil and ground water remedy for Romic East Palo Alto facility. November 1.

Tarr, Brad, Resident, City of East Palo Alto. 2007. Written comment submitted at U.S. EPA public hearing on proposed soil and ground water remedy for Romic East Palo Alto facility. October 10.

Tschang (Chang), David, Resident, City of East Palo Alto. 2007. Written comment submitted at U.S. EPA public hearing on proposed soil and ground water remedy for Romic East Palo Alto facility. October 10.

U.S. EPA 1988. Administrative Order on Consent US EPA Docket No. RCRA-09-88-0015. December.

\_\_\_\_\_ 2004. User's Guide and Background Technical Document for US EPA R9's Preliminary Remediation Goals (PRG) Table. October.

2007a. Statement of Basis for Proposed Soil and Ground Water Remedy, Romic Environmental Technologies Corporation, East Palo Alto, California, U.S. Environmental Protection Agency, Region 9. September 14.

# **Glossary of Terms**

*Administrative Order* - A legal agreement signed by U.S. EPA and an individual, a business, or other entity through which the responsible party agrees to perform or pay the cost of a site Remediation. The order describes actions to be taken at a site and can be enforced in court. A consent order does not have to be approved by a judge.

*Administrative Record* - The documents and information that are considered or relied upon to make a remedy selection decision for a site. These documents are available for public inspection usually at the nearest public library to the site.

*Aerobic* - with oxygen, or oxygen-rich. Aerobic ground water typically contains greater than 0.5 mg/l dissolved oxygen.

*Anaerobic* - without oxygen, or very low in oxygen. Anaerobic ground water typically contains less than 1.0 mg/l dissolved oxygen.

Aromatic VOC's or Aromatic Volatile Organic Compounds include, but are not limited to, benzene, toluene, ethylbenzene and xylenes.

Aquifer - An underground formation composed of materials such as sand or gravel that can store and supply ground water to wells and springs.

BTEX - Abbreviation for the compounds benzene, toluene, ethylbenzene and xylene.

*Cal-EPA or California Environmental Protection Agency, DTSC or Department of Toxic Substances Control, or Department of Health Services (DHS), DTSC -* The state agency which is responsible for regulating hazardous waste in California. DTSC has the authority to enforce federal and state hazardous waste regulations.

*Chlorinated Solvents* - See Ahalogenated VOCs.@ Chlorinated solvents are a subset of halogenated VOCs.

*Corrective Action* - Those actions taken to investigate and clean-up contaminant releases from hazardous waste treatment, storage, and disposal facilities.

*Corrective Measures Study (CMS)* – A study conducted by the facility owner or operator to identify and evaluate alternative remedies to address contaminant releases at a site.

*Corrective Measures Implementation (CMI)* - During the CMI, the facility owner or operator designs and constructs the remedy selected by U.S. EPA. The owner or operator must also operate, maintain, and monitor the system after construction.

*DNAPL* - Dense, Non-Aqueous Phase Liquid. A chemical compound which is liquid at ambient temperature, and denser than water. Generally refers to highly concentrated volumes of chlorinated solvents such as trichloroethene, tetrachloroethene, or their transformation products.

Because these chemicals are denser that water, they can move down through the water table and contaminate deeper aquifers. Also used to describe less volatile compounds such as creosote and other wood-treating chemicals.

Downgradient - Similar to downstream, ground water flows from upgradient to downgradient.

*Environmental Screening Levels (ESLs)* - ESLs are chemical specific concentrations that are used for human health and ecological screening. The ESLs were developed by the San Francisco Bay Regional Water Quality Control Board. The ESLs are used to determine if further evaluation is warranted, in prioritizing areas of concern, in establishing initial cleanup goals, and in estimation of potential human health risks. For carcinogens, the human health ESLs are based on a target excess cancer risk of one in a million. This represents the upper (most health protective) end of the acceptable range of one-in-ten thousand to one-in-a million recommended by the U.S. EPA for contemplating remediation of sites.

Ground Water - Water, found beneath the earth's surface, which often supplies wells and springs.

*Halogenated VOC's or Halogenated Volatile Organic Compounds* include, but are not limited to, the following compounds that contain chlorine: tetrachloroethene (PCE), trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE), 1,1-dichloroethane (1,1-DCA), 1,2- dichloroethane (1,2-DCA), trans-1,2-dichloroethene (1,2-DCE), carbon tetrachloride, 1,1,1-trichloroethane (1,1,1-TCA), chloroform and methylene chloride.

In-situ Treatment - Treatment of contamination in-place.

*Interim Remedial Measures* - Short-term actions taken to prevent human or environmental exposure to contaminants from a hazardous waste site, to control a source of contamination, or to limit the spread of contamination prior to the implementation of a long-term remedy plan.

*Land Use Restrictions or "Covenant to Restrict Use of Property"* - A clause in a deed restricting the manner in which a property can be used, based on a remaining environmental issue. For example, a deed for a residential property may contain restrictions that would prohibit water wells on the property, due to underlying ground water pollution.

*Semivolatile Organic Compound (SVOC)* – An organic (carbon containing) compound that does not evaporate easily at room temperature. SVOCs at the Romic facility include isophorone and bis (2-chloroisopropyl) ether.

*Maximum Contaminant Level or MCL* means the maximum permissible level of a contaminant in water delivered to any user of a public water system. MCLs are enforceable standards. Primary MCLs take in to account a chemical's health risks..

*Metals (heavy metals)* - Metallic elements with high atomic weights, such as chromium, cadmium, arsenic and lead. Heavy metals can damage living things at low concentrations and tend to accumulate in the food chain.

*Polychlorinated biphenyls (PCBs)* - Polychlorinated biphenyls are a group of man-made chemicals that contain 209 different compounds with varying toxicity. PCBs have been used widely as coolants and lubricants in transformers, capacitors and other electrical equipment. The manufacture of PCBs in the United States stopped in 1977 because of evidence that PCBs accumulate in the environment and may cause health hazards.

*RCRA Facility Investigation (RFI)* - An in-depth study to determine the nature and extent of contamination at a RCRA treatment, storage, or disposal facility; establish criteria for remediating the site; identify preliminary alternatives for remediating the site; and support the technical and cost evaluation of the alternatives.

*Resource Conservation and Recovery Act (RCRA)* - A federal law that established a regulatory system to track hazardous waste from the time of generation to disposal. The law requires facilities to obtain a permit if they treat, store or dispose of hazardous waste. RCRA is designed to prevent new, uncontrolled hazardous waste sites.

*Risk-Management Plan* - The risk management plan contains practical ways to mitigate risk for occupants and workers presented by exposure to pollutants that are present in soil and/or ground water on a property. Such measures often engineering controls (i.e. capping with asphalt or buildings) and institutional controls (deed restrictions, preventing certain uses of a property). This document also serves to disclose site conditions and provide public information.

*Slough* - A creek in a marsh or tidal flat. The sloughs north and east of the Romic facility drain into San Francisco Bay.

*Trichloroethene (TCE)* - A liquid used as a solvent, metal degreasing agent, and in other industrial applications. TCE may be a human carcinogen.

 $\mu g/l$  - Micrograms of contaminant per liter of water, approximately equivalent to parts per billion.

*Vadose Zone* - The zone between the land surface and the surface of the saturated zone. The surface of the saturated zone is also referred to as the ground water table.

*Volatile Organic Compound (VOC)* - Any organic (carbon containing) compound that evaporates easily at room temperature. VOCs are commonly used in dry cleaning, paint stripping, metal plating, and machinery degreasing.

*Well* - A bored, drilled, or driven shaft whose purpose is to reach underground water (ground water). In the case of the Romic facility, there are two types of wells in the area; monitoring wells which are used for gathering samples in order to detect and evaluate ground water pollution, and injection wells which are used to inject cheese whey and molasses into contaminated ground water for enhanced biological treatment.

 $10^{-4}$  to  $10^{-6}$  lifetime cancer risk: A  $10^{-4}$  to  $10^{-6}$  lifetime cancer risk illustrates a range of the theoretical likelihood of developing cancer as a result of the environmental exposure of interest.

The range represents the probability of developing cancer in excess of the background cancer rate. In the United States, roughly 33% of the population will develop cancer over the course of their life, which means that, on average, approximately 333,000 individuals in a population of one million individuals, will develop cancer. A  $10^{-4}$  risk represents one additional case of cancer in a population of 10,000 (or 100 in a population of one million), while a  $10^{-6}$  cancer risk level suggests that one additional case of cancer will develop in a population of one million.

# Appendix A

# **U.S. EPA Response to Public Comments**

On

Proposed Soil and Ground Water Remedy for the Former Romic Environmental Technologies Facility, East Palo Alto, California

#### I. Introduction

On September 17, 2007, the U.S. Environmental Protection Agency (U.S. EPA) began a 45-day public comment period during which it solicited comments on its proposed remedy to address soil and ground water contamination at the former Romic Environmental Technologies Corporation facility in East Palo Alto, California (Romic facility). The proposed remedy was documented in U.S. EPA's September 14, 2007 Statement of Basis for Proposed Soil and Ground Water Remedy, Romic Environmental Technologies Corporation, East Palo Alto, California (September 2007 Statement of Basis or SB). The comment period closed on November 1, 2007.

U.S. EPA conducted a public meeting and hearing on October 10, 2007 in East Palo Alto, California. Approximately 35 people attended the public meeting and hearing. U.S. EPA received verbal comments from 14 individuals and written comments from two people during the public hearing portion of the meeting. A court reporter recorded the verbal comments and prepared a transcript. In addition, U.S. EPA received written comments through both electronic and U.S. Postal Service mail.

U.S. EPA coordinated with the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) and the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) in developing and finalizing the remedy.

This appendix presents each of the 139 public comments U.S. EPA received on the proposed remedy together with U.S. EPA's responses.

#### **II. Public Comments on Proposed Remedy**

Nineteen individuals and organizations provided U.S. EPA with 139 comments on the proposed remedy. The 139 comments and the U.S. EPA responses are organized into the following 18 subject areas:

- 1. Coordination of Facility Closure and Site Cleanup Plan (5 comments)
- 2. Enforcement of Cleanup Plan (2 comments)
- 3. Exposure Assessment for Human Health (14 comments)
- 4. Extent of Contamination (9 comments)
- 5. Facility Closure (1 comment)
- 6. Financial Assurance (9 comments)
- 7. Five Year Remedy Performance Evaluation Reports (2 comments)
- 8. Ground Water Cleanup (9 comments)
- 9. Investigation and Remediation of Inaccessible Areas (15 comments)
- 10. Land Use Restrictions and Risk Management Plan (8 comments)
- 11. Media Cleanup Objectives (18 comments)
- 12. Miscellaneous (10 comments)
- 13. Public Participation (14 comments)
- 14. Redevelopment of Romic Property (2 comments)

- 15. Remedial Technologies (5 comments)
- 16. Remedy Contingencies (4 comments)
- 17. Slough Investigation and Remediation (8 comments)
- 18. Timing of Site Cleanup and Plan Approvals (4 comments)

The 19 individuals and organizations listed below submitted comments on the proposed remedy either in writing or verbally at the public hearing held on October 10, 2007. For each commenter, the following information is provided:

- Name
- Affiliation
- Source of Comment (e.g., letter, public hearing testimony)
- "Comments related to": This section briefly describes the comment topic and subject area where the comment and U.S. EPA response can be found in this document. The subject area for each comment is shown in parentheses following the topic. For example, a typical entry may look like this: Responsibility for Slough Sediment Cleanup (see Slough Investigation and Remediation). The comment topic is "Responsibility for Slough Sediment Cleanup" and it is located in the Slough Investigation and Remediation subject area. Thus, to locate this comment from the individual or organization, the reader would look in the Slough Investigation and Remediation section.

#### 1. Alvarez, Alvaro, Youth United for Community Action, October 10, 2007 Public Hearing Testimony and October 24, 2007 letter

Comments related to: Least Information on Most Contaminated Areas (see Extent of Contamination), Responsibility for Slough Sediment Cleanup (see Slough Investigation and Remediation), Monitored Natural Attenuation (see Ground Water Cleanup), Investigation of Inaccessible Areas (see Investigation and Remediation of Inaccessible Areas) and Statement of Basis Complexity (see Miscellaneous)

#### 2. Cruz, Miriam, Youth United for Community Action, Resident, City of East Palo Alto, October 10, 2007 Public Hearing Testimony and October 22, 2007 letter

Comments related to: Removal of Facility Structures and Site Cleanup (see Investigation and Remediation of Inaccessible Areas)

#### 3. Deboe, Vita, Youth United for Community Action, October 10, 2007 Public Hearing Testimony

Comments related to: Informing the Community (see Public Participation)

# 4. Domingo, Charisse, Youth United for Community Action, October 10, 2007 Public Hearing Testimony and November 1, 2007 email

Comments related to: Risk Estimates Not Based on Vulnerable Populations (see Exposure Assessment for Human Health), Covenant to Restrict Use of Property (see Land Use Restrictions and Risk Management Plan), Ground Water Cleanup Objectives - Maximum Contaminant Levels for Drinking Water (see Media Cleanup Objectives), Surface Water Estuarine Screening Levels (see Media Cleanup Objectives), October 10, 2007 U.S. EPA Open House and Public Meeting/Hearing (see Public Participation), Responsibility for Slough Sediment Cleanup (see Slough Investigation and Remediaiton), and Timing for Cleanup Plan Approval (see Timing of Site Cleanup and Plan Approvals)

# 5. Evans, Keisha, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony

Comments related to: October 10, 2007 Open House and Public Meeting/Hearing (see Public Participation), Appointment of Citizens Committee (see Public Participation), Timing of Project (see Timing of Site Cleanup and Plan Approvals), Migration of Contaminated Ground water (see Extent of Contamination), Level of Financial Assurance (see Financial Assurance), Action on Slough Contamination Needed (see Slough Investigation and Remediation), and Documentation of Remedy Effectiveness Needed (see Ground Water Cleanup)

#### 6. Evans, Keisha A., Saundra Webster, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter

Comments related to: Violations of Cleanup Plan (see Enforcement of the Cleanup Plan), Timing for Cleanup Plan Approval (see Timing of Site Cleanup and Plan Approvals), Closure and Site Cleanup (see Coordination of Facility Closure and Site Cleanup Plan), Responsibility for Slough Sediment Cleanup (see Slough Investigation and Remediation), Revision of Land Use Covenant and City Review of Covenant to Restrict Use of Property (see Land Use Restrictions and Risk Management Plan), Ground Water Cleanup Objectives - Cumulative Effects of Chemicals (see Media Cleanup Objectives), Procedures to Amend Cleanup Plan (see Remedy Contingencies), Informing the Community about Investigation Findings (see Investigation and Remediation of Inaccessible Areas), Inaccessible Area Investigation/Remediation (see Investigation and Remediation of Inaccessible Areas), Capping - Containment - Permits - Transformation of Chemicals - Impacts on People (see Remedial Technologies), Sensitive Receptors Should Be Considered in Human Health Risk Assessment (see Exposure Assessment for Human Health), Comprehensive Human Health Risk Assessment Needed (see Exposure Assessment for Human Health), What is Process if Cleanup Costs are Higher than Financial Assurance (see Financial Assurance) and Concrete Site Cover Impacts on Redevelopment (see Redevelopment of Romic Property)

# 7. Evans, Peter, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony

Comments related to: Appointment of Citizen Committee (see Public Participation) and Cleanup Permit (see Miscellaneous)

# 8. Flores, Oscar, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony

Comments related to: Maximize Financial Assurance (see Financial Assurance) and Romic Gila River Facility in Arizona (see Miscellaneous)

#### 9. Gardner, Paul, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony

Comments related to: Adequacy of Financial Assurance (see Financial Assurance) and Community Designated Consultant (see Public Participation)

#### 10. Holmes, Lorraine, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony

Comments related to: Future Development (see Redevelopment of Romic Property)

11. Huerta, Bernardo, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony

Comments related to: Doubts Effectiveness of Enhanced Biological Treatment (see Ground Water Cleanup)

### 12. James, Alvin, City Manager, City of East Palo Alto, October 26, 2007 letter

Comments related to: Expedited Site Cleanup (see Miscellaneous), Reliability of Existing Risk Assessment Reports (see Exposure Assessment for Human Health), Recreational Exposure Along Slough Trail (see Exposure Assessment for Human Health), Contamination on Adjacent Property and Contamination on Adjacent Parcels – Infinity Salvage (see Extent of Contamination), Background Figures (see Extent of Contamination), Pollution Legal Liability and Cleanup Cost Cap Insurance (see Financial Assurance), Cost Estimates for Remedy Alternatives and Insurance (see Financial Assurance), Monitored Natural Attenuation (see Ground Water Cleanup), Potential Residential Uses and Day Care Prohibition (see Land Use Restrictions and Risk Management Plan), Residual Contamination (see Media Cleanup Objectives), Achievement of Media Cleanup Objectives – Romic Petition (see Media Cleanup Objectives), Proposed Excavation of 3072 Cubic Yards of Contaminated Soil (see Remedial Technologies), Timing for Slough Remediation (see Slough Investigation and Remediation), Timeframe to Complete Remediation (see Timing of Site Cleanup and Plan Approvals) and Size of Former Romic facility (see Miscellaneous)

#### 13. Loya, Annie, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony

Comments related to: Coordination of Facility Closure and Site Cleanup (see Coordination of Facility Closure and Site Cleanup Plan), Question and Answer Session of Public Meeting (see Public Participation) and Community Oversight (see Public Participation)

#### 14. Mena, Gabriel, Youth United for Community Action, October 10, 2007 Public Hearing Testimony and October 23, 2007 letter

Comments related to: Ground Water Cleanup Objectives - Maximum Contaminant Levels for Drinking Water (see Media Cleanup Objectives) and Ground Water Use (see Media Cleanup Objectives)

### 15. Naranjo, Brenda, Resident, East Palo Alto, California, October 24, 2007 letter

Comments related to: Removal of Facility Structures and Site Cleanup (see Investigation and Remediation of Inaccessible Areas), October 10, 2007 U.S. EPA Open House and Public Meeting/Hearing (see Public Participation), Complexity of Statement of Basis (see Miscellaneous)

# 16. Romero, Carlos, Vice-Chair, East Palo Alto Planning Commission (Individual Comment, Not from Planning Commission), November 1, 2007 email

Comments related to: Coordinated Agency Approach for Closure and Site Cleanup (see Coordination of Facility Closure and Site Cleanup Plan), Potential Health Impacts from Contaminated Soil Excavation (see Exposure Assessment for Human Health), Exposure Pathway for Fish May Need More Examination (see Exposure Assessment for Human Health), Ground water Monitoring in C and D -zones (see Extent of Contamination), Definition of Facility Closure Needed (see Facility Closure), Third Party Review of Cost Estimate and Cost Overrun Contingency (see Financial Assurance), Enhanced Biological Treatment (see Ground Water Cleanup), Monitored Natural Attenuation (see Ground Water Cleanup), Effectiveness of Monitored Natural Attenuation (see Ground Water Cleanup), Community Involvement for Phase 2 Work (see Investigation and Remediation of Inaccessible Areas, Removal of Structures and Site Cleanup (see Investigation and Remediation of Inaccessible Areas), Timeframe Goals for Phase 2 Investigation and Remediation (see Investigation and Remediation of Inaccessible Areas), Soil Excavation and Removal (see Investigation and Remediation of Inaccessible Areas), City Involvement in Land Use Restrictions and Risk Management Plan (see Land Use Restrictions and Risk Management Plan), Approval of Risk Management Plan (see Land Use Restrictions and Risk Management Plan), Ground Water Cleanup Objectives (see Media Cleanup Objectives), Achievement of Media Cleanup Objectives (see Media Cleanup Objectives), Community Involvement for Contingency Changes (see Remedy Contingencies), Specify Specific Time for Slough Remediation (see Slough Investigation and Remediation) and Responsibility and Timing for Slough Cleanup (see Slough Investigation and Remediation)

#### 17. Tarr, Brad, Resident, City of East Palo Alto, Written Comment, U.S. EPA Public Hearing, October 10, 2007

Comment related to: Fugitive Contamination (see Extent of Contamination)

#### 18. Tschang (Chang), David, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony and U.S. EPA Comment Form, October 10, 2007

Comments related to: Education of Community (see Public Participation), State Landuse Regulation - Land be Used for Small Businesses (see Redevelopment of Romic Property), Cleanup Costs (see Financial Assurance), Reports on DVD (see Public Participation), Public Hearing Transcript (see Public Participation) and Size of Drum Storage Area and Process Plant (see Miscellaneous)

#### 19. Turner, Anna, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony

Comments related to: Violations of Cleanup Plan (see Enforcement of Cleanup Plan), Life of 5-Year Remedy Performance Evaluation Reports (see Five Year Remedy Performance Evaluation Reports), Soil Excavation and Removal (see Investigation and Remediation of Inaccessible Areas), October 10, 2007 U.S. EPA Open House and Public Meeting/Hearing (see Public Participation), Proactive Approach for Cleanup (see Public Participation) and Investigation in Public Areas (see Miscellaneous)

#### III. U.S. EPA RESPONSE TO PUBLIC COMMENTS ON PROPOSED REMEDY

The 139 public comments along with U.S. EPA responses are organized into the 18 subject areas listed below. The subject areas are in alphabetical order.

#### 1. Coordination of Facility Closure and Site Cleanup Plan

# The following four comments raise similar concerns and are addressed in a single U.S. EPA response:

#### Comment 1.1. Closure and Site Cleanup

This Clean up plan was written before the DTSC order to Romic dated August 30, 2007. How does the closure plan mandated by DTSC affect this clean up plan and visa versa? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

Comment 1.2. Closure Plan and Cleanup Plan

The Closure Plan and Cleanup Plan must happen at the same time and the two responsible agencies must work together for the benefit of our community. (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

Comment 1.3. Coordination of Facility Closure and Site Cleanup

In regards to the closure tendencies. So in 2005, U.S. EPA realized East Palo Alto has the tendency of all these different agencies to double up on plans. In 2005, EPA released a draft permit for the ROMIC facility and the EIR. It raised the concern that there were going to be two comment periods happening every where, everyone we talked to and anywhere else we read we found out that has never been done before. We found out this was a very unique situation and as someone called it, during that time. Well, usually there's a report, and EIR is released and there's a project. EIR is released, our comments are made and addressed, then there's a decision at that original EIR. Soon after will follow a draft permit comment period, but for East Palo Alto, we had the opportunity, we were blessed to have two periods at the same time.

So, two years later in 2007 we find ourselves in a similar situation. U.S. EPA has issued for comments the cleanup plan which will soon be followed by DTSC and Romic's disclosure plan. So, we find ourselves in a very confusing place. How do we comment on cleanup while we're thinking on closure? How do we comment on closure when we're thinking of cleanup. How do we best stand to be concerned on two separate yet related documents? How do we then we ask ourselves, when is the best route to properly address, properly address these concerns to really clean and decontaminate this site would be to do statement disclosure and cleanup happen simultaneously. We think so. (A. Loya, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

#### Comment 1.4. Coordinated Approach for Closure and Site Cleanup

The Statement of Basis (SB) calls for U.S. EPA & DTSC to coordinate the closure of the facility with the remediation of soil and ground water contamination. Where is this coordination spelled out and how is it to occur? Will a joint oversight body to be established? This coordination process should be clearly delineated within the SB/remedy since various aspects of the closure will affect the timing of the remediation, i.e. additional soil and ground water studies, removal of structures obstructing contaminated areas, etc.

I suggest that a more coordinated approach would be to modify and approve the proposed remedy once DTSC has approved the Facility Closure Plan. By doing so U.S. EPA could influence and help define the timing and removal of structures during the facility closure period that obstruct remediation efforts. DTSC's approval process appears to be only a few months behind U.S. EPA's approval of a final remedy so the delay of the final remedy would be minimal. Moreover, this approach would provide for more articulated coordination between the two plans. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

**Response to Comments 1.1, 1.2, 1.3 and 1.4:** The facility closure plan and site cleanup plan work together. The former Romic facility is undergoing closure. Regulatory oversight of facility closure is the responsibility of DTSC. The U.S. EPA will oversee the investigation and cleanup of subsurface soil and ground water contamination. U.S. EPA and DTSC developed a joint two-phased strategy for the facility closure and site cleanup In Phase 1, the closure plan addresses Decontamination, Disassembly and Disposal (DD&D) of the aboveground hazardous waste management units (i.e. tanks, distillation towers). Once the Phase 1 DD&D work is completed, Phase 2 work will begin with a site wide subsurface investigation which will further assess the nature and extent of contamination Plan (CMIP) that details the cleanup work that will take place at the former facility. The CMIP will be developed using the requirements of the Final Remedy Decision and from information gathered during the site wide subsurface investigation. The CMIP will specify the cleanup approaches such as treatment and/or excavation for different areas of the former facility.

#### Comment 1.5. Agency Coordination for Cleanup

What is the relationship between USEPA and DTSC in controlling/supervising this clean up? The cleanup relationship between the two agencies, USEPA and DTSC, is very unclear to the public. (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comment 1.5:** DTSC is the lead agency for overseeing the Decontamination, Disassembly and Disposal (DD&D) of all of the aboveground permitted units that are closing. Romic's closure plan details all of the processes involved with DD&D of all equipment, systems and structures. The decontamination and testing of the concrete surfaces will also be done in this phase.

U.S. EPA is the lead agency for overseeing a site wide subsurface investigation followed by remediation of subsurface soil and ground water contamination. The site wide investigation will gather information that will meet the regulatory requirements of both facility closure and site cleanup. This phase will begin with the sampling of soils and ground water beneath the decontaminated concrete surfaces once the closure DD&D activities have been completed. U.S. EPA, DTSC and the RWQCB will review the site wide investigation workplan. U.S. EPA will assemble the comments from all three agencies into a single response to Romic.

### 2. Enforcement of Cleanup Plan

# The following two comments raise similar concerns and are addressed in a single U.S. EPA response:

### Comment 2.1. Violations of Cleanup Plan

First we believe that it is paramount that USEPA have a plan in the case that Romic violates this plan. There is no indication of what USEPA would do in that situation. USEPA has the authority to obtain civil penalties for any violation (maximum no less than \$10K per day). 271.16(a)(3)(i) under RCRA § 3006. Will USEPA include the penalties for violating the plan <u>in</u> the plan? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

### Comment 2.2. Violations of Cleanup Plan

If anyone violates this plan, what is U.S. EPA prepared to do? I hear earlier statements that we're not out looking for violations, okay. That may be true, but knowing ROMIC'S history, what are you going to do as U.S. EPA to be proactive and not just waiting for something to happen? My Mom always said have a plan A and if plan A doesn't workout, we need to have something just in case. What is that just in case for us? We don't have to wait for something to happen, hold a public hearing, step back, look at it. That might be too late. (A. Turner, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

**Response to Comments 2.1 and 2.2:** The investigation and cleanup work at the former Romic facility is required under an enforceable U.S. EPA Consent Order. In 1988, Romic entered into a RCRA 3008(h) Administrative Order on Consent (Consent Order) with U.S. EPA that required Romic to perform a RCRA Facility Investigation, develop a Corrective Measures Study to evaluate remedial options, and implement a remedy selected by U.S. EPA to correct past releases to the environment from the facility. Romic must pay stipulated penalties as required by the Consent Order if the cleanup plan is not developed and/or carried out in accordance with the final remedy selected by U.S. EPA.

### 3. Exposure Assessment for Human Health

# The following six comments raise similar concerns and are addressed in a single U.S. EPA response:

#### Comment 3.1. Comprehensive Human Health Risk Assessment Needed

### Precautionary Principle

All risk estimates associated with the exposure scenario were beneath or within EPA's target level of acceptable risk and hazard. ..This is in reference to "inhalation pathway of exposure as the sole human exposure pathway." You state that "direct contact with contaminants in surface water and sediment...is considered to represent an infrequent exposure at best, the magnitude of which should not engender significant excess carcinogenic risk or non-cancer hazard." What is this statement based on? USEPA must take into account the high cancer rates in East Palo Alto? What kind of "receptors" was the report based on? We have a huge elderly and child population here).

It is imperative that there be a COMPREHENSIVE health risk assessment of East Palo Alto residents and workers especially with concerns around the excavation of soil and the VOC's that are supposed to be in the soil. This should be completed at the beginning of Romic's Closure Plan and in the early stages of this remedy plan. A complete health risk assessment should be carried out NOW with as little delay as possible in order to benefit those affected. (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

Comment 3.2. Sensitive Receptors Should be Considered in Health Risk Assessment

My primary concerns, however, are around the Health Risk Assessments. In the Health and Human Risk Assessment section of the report, you write, "All risk estimates associated with the exposure scenario were beneath or within EPA<sup>1</sup>s target level of acceptable risk and hazard." This is in reference to "inhalation pathway of exposure as the sole human exposure pathway." They said that "direct contact with contaminants in surface water and sediment is considered to represent an infrequent exposure at best, the magnitude of which should not engender significant excess carcinogenic risk or non-cancer hazard." What is this statement based on? Again, did you take into account the high cancer rates in East Palo Alto? What kind of "receptors" did you base it on? Did you take into account that seniors and young children make a big portion of our community? (C. Domingo, Youth United for Community Action, November 1, 2007 email)

Comment 3.3. Health Risk Assessment for Romic Workers and City Residents

Health Risk Assessment of the Romic workers and the residents is a MUST. This should not be put off for years, but can be carried out efficiently in the shortest possible time - within months. (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter) Comment 3.4. Risk Assessment for Workers and Vulnerable Populations

My next comment relates to that because you used incomplete Health Assessments - especially in the 1999 HRA that DTSC used in their permitting process to claim Romic was safe. This health assessment did not evaluate the risk on current and future on-site workers and nearby off-site workers who may be exposed to volatile chemicals in soil and ground water via inhalation of ambient air nor "adult and child residents living in the nearby houses who may be exposed to volatile chemicals in soil and ground water via inhalation of ambient air."

In 2004, our organization conducted a health survey on 760 residents in the area and we found alarming statistics that no agency could give us. We found that 1 in 4 children under the age of 21 have asthma; 1 in 7 residents have asthma; and 1 in 32 have cancer. How do these statistics play a part in determining the cancer risk your agency is allowed to tolerate?

Even more so, the health risk assessment has no testing on workers, who are most vulnerable. Given Romic<sup>1</sup>s horrible track record of worker safety, if your agency does not take into account the safety of the workers who will be implementing this clean-up plan, then your agency would be just as guilty and irresponsible as Romic.

Without a complete health risk assessment, this plan will be incomplete at best and irresponsible at worst. (C. Domingo, Youth United for Community Action, November 1, 2007 email)

Comment 3.5. Risk Estimates Not Based on Vulnerable Populations

My name is Charisse Domingo and I'm also with YUCA Youth for Community Action and I'm very concerned to the exposure to human health receptor of this report. In the report, U.S. EPA identified three main receptors who could be exposed as a result of the cleanup. So, you all identified the onsite workers and the nearby offsite workers working at the junkyard, the adult and child recreational users of the bike path at the slough and the adult and child residents living in the houses. They use the health issue assessment developed in the 1990's including the 1999 HRA study that bases the health risk assessments only on the occasional recreational users of the bike path, and then after that, you conclude that despite, again, to find them, you still say this cleanup is safe because the risk estimates associated with the exposure scenario are beneath or within EPA's target level for and acceptable risk and behavior.

So, the first thing were concerned about that these risks estimates are not based on the kinds of vulnerable population that live in East Palo Alto. We did a health survey in 2004. One in four young people under the age of 21 have asthma, one in seven residents have asthma. One in 32 have cancer. The second thing, the second thing is that, oh, yes, let me remind folks that. U.S. EPA's track records are saying something is safe. Only seven days after the World Trade Center collapsed, the U.S. EPA head administrator, Christine Todd Whitman said: "Given the scope of the tragedy from last week, I am glad to reassure the people of New York that their air is safe to breathe and the water is safe to drink". At the time EPA tests at ground zero had already found elevated levels of dioxin, pcb's, lead and chromium which are all toxic. Later the EPA found benzene, a colorless liquid that evaporates quickly and can cause Leukemia in long term exposure measuring 58 times greater than the Federal limits and the EPA did not release these

results for two weeks, as an oversight, a spokes woman described as an oversight, and you know what the cost was in November of 2006, the Village Voice reported that 75 recovery workers at ground zero will be diagnosed with blood cell cancers that a half a dozen top doctors and epidemiologists have confirmed as having been likely caused by ground zero. By June of 2007, 10,000 people had filed claims against the city of New York regarding exposure to ground zero toxics. Then, days after Hurricane Katrina, despite the fact that Louisiana is home to over 125 oil and chemical plants in the chemical corridor, known as "cancer alley" between New Orleans and Baton Rouge where a series of low-income, predominantly African-American low-income families live, the U.S. EPA still called the toxic soup that flowed out of the chemical industry mixed with the flooding sick.

So, now that we know that the U.S. EPA track record is saying what it is saying what is safe and how your standards of safety obviously puts people at risk. So, we demand a complete up-todate health risk assessment for the sake of the workers who will be working on the excavation of the soil and for the residents who live here in East Palo Alto and we demand that this be completed before phase two where the excavation hopefully not evacuation will take place. And without this, this report will be complete, at best, and irresponsible at worst. So, this is your chance to make it right. Don't put any more of the lives of people at risk. You're supposed to protect the health and environment of our people. So, get this one right. (C. Domingo, Youth United for Community Action, October 10, 2007 Public Hearing Testimony)

Comment 3.6. Sensitive Receptors Should be Considered in Human Health Risk Assessment

The discussion of Exposure to Human Health and Ecological Receptors involved information on human health and ecological risk assessments that have been conducted based upon exposure to chemicals released by Romic.

The Exposure Pathway goes from 1) source 2) how strong that retention method is, 3) the receptor, 4) the route (route-inhalation, swallowing, etc). Because one source is UNDER concrete (but not the slough), there presently exists an incomplete exposure pathway). Because there is contamination in the slough, the health and ecological risk assessments presently are necessary there.

Identified who can be exposed:

• On-site workers and nearby-offsite workers working at the junkyard or City Public Works employees

- Adult and child recreational users of the bike path and the tidal slough
- Adult and child residents living in the houses.

We have the following questions:

What kind of receptors did USEPA base this on? Did you take into account the sensitive and vulnerable populations of East Palo Alto given that we have the highest cancer and asthma rates

in San Mateo County? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

#### Response to Comments 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6:

The protection of on-site workers and the residents of East Palo Alto is U.S. EPA's top priority. U.S. EPA will require that Romic monitor and mitigate vapor emissions from cleanup work such as excavation of contaminated soils. Romic will prepare Health and Safety plans that contain requirements to protect on-site workers during the investigation and cleanup effort. In addition, to address the potential health risks associated with diesel exhaust during the site cleanup, U.S. EPA is requiring that Romic use clean diesel technologies, clean fuels and/or clean construction practices on diesel powered engines greater than 25 horsepower. U.S. EPA is also requiring confirmatory sampling and a risk analysis for any redevelopment of the property after the cleanup work has been completed.

The facility is not operating and is undergoing closure. The potential health impacts from further investigation and cleanup of the former facility are temporary and will be mitigated.

<u>Mitigation of Off-Site Exposure to Community</u>: U.S. EPA will require that Romic prepare a Corrective Measures Implementation Plan or CMIP after the final remedy is selected for the facility. The CMIP defines the cleanup work that will be done and all of the safety measures that will be taken to ensure the community is protected during the investigation and cleanup. U.S. EPA will ensure that the CMIP contains measures to monitor and mitigate volatile organic compound emissions from excavation of contaminated soils and the transport of the soils off-site. The exact nature of the safety measures are not known at this time since the CMIP has not yet been prepared. U.S. EPA, DTSC and/or RWQCB representatives will be periodically present at the site to observe the field work and ensure that it is being done in accordance with the approved CMIP.

<u>Health and Safety Plans to Protect Workers</u>: On-site workers at the former facility will be involved with the further investigation and remediation of soil and ground water contamination. U.S. EPA is requiring that Romic prepare comprehensive Health and Safety (H&S) Plans for all investigation and remediation work to be conducted at the facility. The H&S Plans, which must comply with Occupational Safety & Health Administration regulations, describe in detail how remediation workers will be protected during the investigation and cleanup work at the facility. The H&S Plans will require that all workers have certified hazardous waste training, medical monitoring and personal protective equipment. The H&S Plans will also require that field monitoring equipment be used to assess concentrations of volatile organic compounds in the air.

#### Actions to Mitigate the Effects of Diesel Particulate Emissions from Construction Equipment

U.S. EPA is requiring that Romic take actions to reduce emissions from diesel powered engines used in the cleanup of the former facility. Romic will determine, subject to U.S. EPA review and approval, the level of such diesel mitigation on a case-by-case basis for earth movement, drilling and transportation activities at the site.

Mitigation may include:

(1) the highest level of verified diesel technologies be installed on off-road and on-road diesel powered equipment, such as diesel particulate filters and diesel oxidation catalysts. Such controls will be required for off-road equipment by the California Air Resources Board's (CARB's) Final Regulation Order for In-Use Off-Road Diesel Vehicles beginning in 2009 which applies, in part, to the rental sector which may own such equipment,

(2) idling of construction equipment, trucks and vehicles be limited to five minutes or less,

(3) engines be tuned to manufacturers' specifications,

(4) ultra low sulfur diesel and/or another clean fuel be used in off-road and on-road diesel equipment,

(5) trucks meet emission standards, and

(6) a plan be developed and implemented to limit truck traffic through the community.

In addition, for drilling applications which require portable engines, at least Tier 2 engines will be required if feasible. Tier 2 engine standards for off-road engines are a series of emission standards for engines constructed between the years of 2001 and 2006.

<u>Risk Analysis for Future Redevelopment</u>: The final remedy requires a risk analysis for any redevelopment of the site after the cleanup work has been completed. A Risk Management Plan (RMP) is required in the Covenant to Restrict Use of the Property (Covenant) for any redevelopment of the site. The Risk Management Plan will identify, at a minimum, the previous site history, the nature and extent of contamination from all media, the potential pathways of human exposure, estimates of health impacts from existing site contamination, and practical ways to mitigate the impacts for the specific project. The risk analysis will rely on pre-reviewed estimates of each compounds toxicity or potency. Those estimates were derived to account for the wide range of sensitivities in the general population. Therefore, estimates of health impact following site cleanup will be considerate of the sensitive subgroups in the East Palo Alto community.

The Covenant and the RMP work together to ensure that potential impacts from exposure to contaminated soils, ground water or other media are managed in a manner that is protective of human health and the environment.

# The following three comments raise similar concerns and are addressed in a single U.S. EPA response:

Comment 3.7. Why did you (USEPA and DTSC) mislead the community into thinking Romic was safe when you did not evaluate workers and residents in the 1999 HRA? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

Comment 3.8. Especially in the 1999 HRA that DTSC used, there were incomplete Health Assessments! You (USEPA & DTSC) did not evaluate the risk on current and future on-site workers and nearby off-site workers who may be exposed to volatile chemicals in soil and ground water via inhalation of ambient air. (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

Comment 3.9. You (USEPA & DTSC) did not evaluate "adult and child residents living in the nearby houses that may be exposed to volatile chemicals in soil and ground water via inhalation of ambient air." (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comments 3.7, 3.8 and 3.9:** The comments refer to past risk assessments that were developed when the facility was operating. The situation is very different now. The facility is not operating and is undergoing closure. The potential health impacts from further investigation and cleanup of the former facility are temporary and will be mitigated. In addition, as discussed in the Response to Comments 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6 above, U.S. EPA is requiring that Romic (1) monitor and mitigate vapor emissions from cleanup work and (2) prepare Health and Safety Plans to protect on-site workers. U.S. EPA is also requiring a risk analysis for any redevelopment of the property after the cleanup work has been completed. The estimates of a chemical's toxicity, a necessary input variable for the redevelopment risk analysis, were developed to be considerate of the wide range of human sensitivity in the general population.

# The following two comments raise similar concerns and are addressed in a single U.S. EPA response:

### Comment 3.10. Exposure Pathway for Fish May Need More Examination

The exposure pathway through fish may need more examination. Many EPA residents are from immigrant backgrounds who fish and consume the fish they catch in the area. The SB seems to assume that little fish consumption from the neighboring area is occurring. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

Comment 3.11. Local People Fish in Sloughs and Bay Near Romic

People do fish in the sloughs and Bay near Romic and the risk is more than minimal. The people in this community continue to eat the fish due to custom and for economic reasons. (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comments 3.10 and 3.11:** This remedy decision is for on-site contamination at the former Romic facility and does not address the eastern tidal slough (see September 2007 Statement of Basis). U.S. EPA will address the sediment contamination in a separate remedy

decision. However, U.S. EPA believes that fish that swim in the slough are not at significant risk from site related volatile organic compound contamination because concentrations of these contaminants in the slough surface water are all below the appropriate Surface Water Estuarine Screening Levels. These screening levels are the media cleanup objectives for surface water selected by U.S. EPA as part of the final remedy. The estuarine screening levels, which were developed by the RWQCB, are derived from various regulatory sources (e.g., California Toxics Rule, Criterion for Continuous Concentration) and generally represent the most stringent of available action levels for aquatic habitat protection. They are designed to be protective of both human health and the environment by accounting for potential bioaccumulation of chemicals in aquatic organisms and subsequent human consumption of these organisms. Locally, the areas south of the Dumbarton Bridge are considered to be estuarine. The Estuarine Screening Levels are discussed in further detail in the September 2007 Statement of Basis which was prepared by U.S. EPA. Fish population surveys discussed in previous ecological assessment reports indicate that the fish in the tidal slough are few in number, small in size and are of a species not typically consumed by humans.

### Comment 3.12. Reliability of Existing Risk Assessment Reports

Page 21, Table. How reliable are these studies when the most recent one is 8 years old? Also, the most recent study was the least comprehensive. The last comprehensive study was done in 1993, which was 14 years ago. (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

**Response to Comment 3.12:** The risk assessments were prepared assuming there was an operational facility in place and are not applicable to the site cleanup process. A risk management plan is required for any future redevelopment of the Romic property. The risk management plan will evaluate the risks for a proposed redevelopment project and identify possible mitigation measures after the cleanup process has been completed at the facility.

#### Comment 3.13. Recreational Exposure Along Slough Trail

The City's vision is for the Bay to provide more recreational and transportation opportunities for East Palo Alto residents and people throughout the Bay Area. In June 2007, the East Palo Alto City Council adopted the Bay Access Master Plan (BAMP), which includes open space improvements near the north and east sloughs.

Specifically, the BAMP calls for a trail along the northern edge of the Romic property that crosses the east slough to connect to the existing Bay Trail, a pocket park at the intersection of the aforementioned trails, and the establishment of Cooley Landing as a major recreational center. Cooley Landing might provide water recreation such as kayaking, canoeing, and fishing. The BAMP is available at:

www.ci.east-palo-alto.ca.us/economicdev/images/BAMP%20Final %205%2023 %2007.pdf

Page 19, last paragraph. The potential for recreational exposure will greatly increase as the Bay Trail is completed and as Cooley Landing is developed. See comment above regarding Cooley Landing. (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter) **Response to Comment 3.13:** Since the facility is not operating and is closing, the potential health impacts from further investigation and cleanup are temporary and will be mitigated.

Volatile organic compounds (VOCs) have been detected in the surface water of the sloughs located to the north and east of former facility. Concentrations of VOCs in the surface water currently do not exceed the surface water cleanup objectives. The surface water is monitored on a quarterly basis.

The 1999 Environ risk assessment report examines the potential impact on a canoeist using the slough. The canoeist would be located directly on the surface water of the slough and thus would incur the maximum exposure to VOCs because of close proximity to the source (surface water). Thus, this represents a worst case scenario. Since the risk assessment indicates that inhalation impacts to the canoeist are acceptable, we can also conclude that impacts to potential users of the bike path, who would be much farther away from the surface water, shall also be acceptable. The 1991 Harding Lawson human health risk assessment did consider pedestrians and bikers on the walking path and at Cooley Landing and found risk estimates to be within the acceptable range of one-in-ten thousand to one-in-a million.

### Comment 3.14. Potential Health Impacts from Contaminated Soil Excavation

The SB concludes that VOC's in the air are the main exposure pathway to humans, thus the moving and off-hauling of contaminated soils from the site expose EPA residents to these contaminants. According to the concluding paragraph of this section (pg. 22), the inhalation exposure pathway needs additional study if future development is to occur. Who will produce this study and when? The quantitative data needs to be generated and standards drawn up for the City and residents to have an objective standard to judge appropriate exposure levels. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

**Response to Comment 3.14:** U.S. EPA is requiring that Romic (1) monitor and mitigate vapor emissions from cleanup work and (2) prepare Health and Safety Plans to protect on-site workers. In addition, U.S. EPA is requiring a risk analysis for any redevelopment of the property after the cleanup work has been completed. The discussion on page 22 of the September 2007 Statement of Basis states that the exposure pathway for inhalation of indoor air by on-site workers and nearby off-site workers has not been quantitatively evaluated. The potential exposure pathway discussed is for vapor intrusion. Vapor intrusion is the migration of chemical vapors, primarily volatile organic compounds, from the subsurface into indoor air. This pathway is being addressed by U.S. EPA's final remedy through the adoption of ground water media cleanup objectives that are more stringent (lower) than the San Francisco Bay-RWQCB Commercial/Industrial Ground water Screening Levels for Evaluation of Potential Vapor Intrusion Concerns and by a focused indoor air monitoring effort consistent with the land use restrictions/risk management plan for redevelopment of the property (see page 26 of the September 26, 2007 Statement of Basis).

### 4. Extent of Contamination

# The following three comments raise similar concerns and are addressed in a single U.S. EPA response:

### Comment 4.1. Fugitive Contamination

Please address "fugitive" contamination offsite that originated at the Romic facility – e.g., spread to Infinity Salvage, Bay Road, etc. – considering that the "plume area in Figure 1 of the September 2006 "Romic Expands Treatment of Contaminated Ground water" fact sheet is shown to have so traveled. (B. Tarr, Resident, City of East Palo Alto, Written Comment, U.S. EPA Public Hearing, October 10, 2007)

#### Comment 4.2. Contamination on Adjacent Property

How will existing and future potential contamination on parcels adjacent to the Romic site be addressed? Figure 5 (Page 17) shows B-Zone VOCs contamination at both the Infinity auto dismantling site to the southeast of Romic and the adjacent Romic-owned "buffer" along Bay Road (Page 10). The Plan should include the Romic "buffer" land (Page 10) because it has VOC contamination, the ground water flows east through this site, and because Romic owns the site. (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

Comment 4.3. Contamination on Adjacent Parcels – Infinity Salvage

What is the plan for addressing the existing ROMIC-generated contamination that migrated, and additional contamination that will migrate to the Infinity auto dismantling site to the southeast of Romic? The Infinity site should be included-if not in this Remedy decision to avoid delays in the initiation of cleanup-in the later action related to the slough adjacent to Romic's eastern boundary. (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

**Response to Comments 4.1, 4.2 and 4.3:** U.S. EPA will require that Romic address any off-site contamination that came from their former facility. As part of the site wide subsurface investigation that will take place after the closure and removal of all permitted hazardous waste management units (e.g., tanks, towers), Romic will be required to investigate the possible off-site migration of contaminated ground water downgradient onto Infinity Salvage property.

If the site wide subsurface investigation shows that contaminated ground water is migrating from the former facility onto the "buffer" land, U.S. EPA will require that Romic address the contamination. The "buffer" land is located adjacent to the southeast boundary of the former facility (outside fence line), occupies approximately 4.6 acres and extends to the southeast to Bay Road.

# The following two comments raise similar concerns and are addressed in a single U.S. EPA response:

Comment 4.4. Least Information on Most Contaminated Areas

So, what I want to talk about is something that not only I feel is just that everyone else feels, that when people read the report, they're isn't much information, or let alone, there isn't enough information that people can even understand. So, this report has the least information on the most contaminated areas on ROMIC. Now, one of the sites, it could be like the former pond area, the central processing area and the southwest storage areas, but these areas have yet to be tested. So, knowing that all around ROMIC is all contaminated stuff, how are we supposed to know what's in there if it hasn't yet been tested? It could be worse. It could be less, but you never know. It's still contaminated as everyone knows. Now, as your report says that 100,000 gallons of wastewater passes under ROMIC. Now, for the people that can't quite picture it that good, it's probably half of this room and 25 feet up. That's 100,000 gallons that passes per week. That's just only per week.

Like I also said on the other sites that I just mentioned, why is it like in the areas that are probably more contaminated or either we don't know how contaminated they are, but like for the other areas that are most contaminated, that's the least information. There is other information for other areas that are least contaminated. There are tons of information that we already know. (A. Alvarez, Youth United for Community Action, October 10, 2007 Public Hearing Testimony)

Comment 4.5. Least Information on Most Contaminated Areas

I would like to say that this report has the least information on the most contaminated areas at Romic. We don't know enough on the most contaminated areas since this report is very repetitive on the least contaminated ones. It is very important to us to know about these areas especially on the most contaminated areas at Romic. Some examples would be the former pond areas, the central processing areas, and the southwest storage areas. We want more information and not just to keep reading about small areas that have some contamination. Your report also talks about 100,000 gallons of wastewater that passes under Romic per week. Now if Romic already has BIG areas that are contaminated and there is no information in them then how do we know what goes or stays under Rornic? We know that knowing about these areas are important but knowing about that most contaminated areas are even more important. (A. Alvarez, Youth United for Community Action, October 24, 2007 letter)

**Response to Comments 4.4 and 4.5:** Following closure and removal of all aboveground permitted hazardous waste management units (e.g., tanks, towers), Romic will conduct a site wide subsurface investigation. This investigation will provide sufficient information to adequately characterize the site for future cleanup work.

The potentially most contaminated areas of the site have been least investigated because they were not accessible due to the operational units located above them. These areas will be accessible for investigation after the units are removed during the closure process. The final

remedy uses a two phased approach which clearly separates yet synchronizes the facility closure and site cleanup. The first phase focuses on the closure of the permitted units. The second phase would then proceed with the subsurface investigation and remediation to achieve cleanup goals.

The 100,000 gallon per week figure cited by the commenter is the estimated amount of wastewater Romic discharged into the two on-site ponds during the early 1970s. This is discussed in Section 5.3.1. (Former Pond Area) of the September 2007 Statement of Basis.

### Comment 4.6. Background Figures

Page 12, Figure 2. It would be helpful to combine this map with the VOCs in Figure 5 and the locations of the monitoring wells in Figure 6. (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

**Response to Comment 4.6:** A single map containing the potential source areas, plume maps and monitoring well locations would be helpful in concept but difficult to comprehend with so much information on a single page. U.S. EPA believes that having three separate but less complex maps would help readers more fully understand the relationship between the potential source areas and the ground water contamination.

### Comment 4.7. Ground water Monitoring in C and D -zones

The SB states that fewer ground water monitoring wells have been installed in Zone C than in Zone B even though Zone C shows only slightly lower contaminant levels than B. It would seem prudent to introduce more monitoring wells into Zone C as part of this remedy, however the SB states that only if necessary would further wells be installed.

A somewhat more controversial recommendation is that at least one additional monitoring well be installed in Zone D. At present only one has been drilled. We understand U.S. EPA's desire not to contaminate the D-Zone with pollutants from the Zone C by penetrating unnecessarily the aquatard that separates them. However, the present single monitoring well into this site appears to be insufficient. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

**Response to Comment 4.7:** U.S. EPA will assess the appropriate level of monitoring for the A, B and C- ground water zones following completion of the site wide remediation and cleanup. It is likely that one or more additional monitoring wells will be installed in the C-zone to monitor the effectiveness of the enhanced biological treatment.

U.S. EPA believes that it is risky to install additional monitoring wells in the D-zone ground water. Ground water in the on-site D-zone monitoring well is not contaminated. There is a risk that contamination from the upper A-, B- and C-zones could be spread into the D-zone during the well drilling process. There is an aquitard, approximately 80 feet thick, primarily clay, with thin lenses of sand or gravel, that separates the C-zone from the D-zone. This aquitard, which is the most laterally continuous aquitard at the Romic site, provides a robust barrier to contaminant migration in the ground water from the C-zone to the D-zone.

Installing new monitoring wells into the D-zone ground water could involve drilling through the contaminated A, B and C-zones as well as the 80 foot thick C/D aquitard before reaching the D-zone. This process could create a direct conduit for contamination to move downward. U.S. EPA believes that despite drilling techniques that may reduce the chances of cross contamination, that the benefits of collecting the additional data do not outweigh the risks of possibly contaminating the D-zone aquifer.

#### Comment 4.8. Description of Site Contamination

There must be a better description of chemicals that are/were there and amounts that were/are there. (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comment 4.8:** Romic will conduct a site wide investigation of subsurface soil and ground water contamination following completion of closure and removal of all aboveground permitted hazardous waste management units. DTSC is the lead agency for overseeing the Decontamination, Disassembly and Disposal of the aboveground permitted units. U.S. EPA is the lead agency overseeing the site wide subsurface investigation. The site wide investigation will provide much more detailed information on the location, depth and type of contamination present at the facility. U.S. EPA will make this information available to the community.

#### Comment 4.9. Migration of Contaminated Ground water

Offsite migration of contamination from contaminated ground water, this lady acted like I was thinking that the contaminant would go, and then it would go around, don't play with me. I want to understand how the contaminant moves. I know it's not the same as water. I am not a hydrologist. I am not an engineer or chemical engineer. I don't understand all the -- but I know that it moves differently, if it has a lot of chemicals in it if it has a lot of chemicals, if it does, than just water. So, don't play me cheap and acting like it's going to go (indicating)? These folks do that all the time -- these people are dumb, they don't know what they're talking about. I resent it. It makes me angry and I want you to stop it. Listen when we speak and then process what we said and then respond. Don't assume because my skin is black that I am dumb, don't assume because I'm a woman and I'm old that I don't know what I am talking about. You do it all the time. I'm tired of it. Our community is tired of it. We want some honesty. You get paid out of our taxes. We want honesty from you. (K. Evans, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

**Response to Comment 4.9:** In general, the volatile organic compounds flow with the ground water beneath Romic. This is because these compounds are sufficiently soluble to mix and combine with the slowly moving ground water. Ground water is flowing eastwards toward San Francisco Bay away from the City of East Palo Alto.

### 5. Facility Closure

### Comment 5.1. Definition of Facility Closure Needed

The SB refers extensively to Facility Closure but no precise definition is given that defines when this event is considered to have occurred. A more concise definition as understood by U.S. EPA is called for. Does this term mean:

a) Ceasing of processing operations?

b) Above ground decommissioning of Romic's tanks and processing units?

c) A scraped or razed site?

If the timing of the cleanup is conditioned on facility closure then an accurate definition of what is meant by closure of the facility is needed. Without such a definition, setting up a realistic seven year timeline for meeting the media cleanup objectives will be difficult. Moreover, this definitional ambiguity could cause confusion within the community. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

**Response to Comment 5.1:** Closure of the facility is when the approved Closure Plan has been fully implemented and DTSC has certified that the closure is complete. For more details on the closure of the former facility, please see the Closure Plan. DTSC is the lead regulatory agency overseeing the closure process.

### 6. Financial Assurance

# The following four comments raise similar concerns and are addressed in a single U.S. EPA response:

### Comment 6.1. Adequacy of Financial Assurance

And, finally, how do we know that this six million dollars I have heard talked about is going to be enough for this cleanup, because if it's going to take somewhere between ten and maybe 20 years, it's sounding like six million is going to be inadequate, and, well, basically, that's it. How do we know if that's going to be enough money to do the job? Thank you. (P. Gardner, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

Comment 6.2. Cost Estimates for Remedy Alternatives and Insurance

Page 34. Both Alternatives. How much risk is involved in these estimates given that the EPA has not tested the ground under the buildings? Does the budget include a contingency or a Clean-up Cost Cap insurance requirement? (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

When you said there is a 1.5 million surety bond and on the next page, the process is going to cost 2.5 million, that makes no sense, that makes no sense. You have time to change that, but we're supposed to miss it or not read it. Most of the time Americans don't read, okay? We get a lot of stuff like watching TV, but you know what? You're with a group of people who read. We have all been mentored by Peter Evans and one of the things we learned from him is we read. We don't read it one time. We read it twice. We read it three times if you don't understand it. Don't waste our time. Don't waste our time. Be honest enough to let me say, look, guys, I don't have time. We're not coming down to East Palo Alto. Send us a letter, okay? We'll send it and the final thing was slough contamination. (K. Evans, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

Comment 6.4. Maximize Financial Assurance

I want to talk about the surety bond. In terms of that, I would want to ask for the U.S. EPA to go for the ceiling in terms of cost and have ROMIC pay up front, not later so you guys don't have to go through any litigation or beg them to give you the money. (O. Flores, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

**Response to Comments 6.1, 6.2, 6.3 and 6.4:** Romic has separate financial assurance mechanisms for closure and site cleanup. Romic's financial assurance for Closure of the facility is a surety bond worth approximately \$5.5 million. DTSC is the lead regulatory agency for facility closure. DTSC will evaluate the \$5.5 million and determine if it is adequate to cover current closure costs for the facility. If DTSC determines that the \$5.5 million is not adequate, additional financial assurance will be required.

The cost estimate for the site cleanup is \$2.5 million. Under the U.S. EPA Remedy Decision, Romic is required to pay for the cleanup of the former facility and, in addition, set aside funding equivalent to another \$2.5 million as financial assurance (surety bond). Should Romic default on its obligation to address the contamination, U.S. EPA would use the money set aside as financial assurance to complete the cleanup at the former facility.

The final corrective action remedy for the former Romic facility requires financial assurance for monitoring, construction, and operation and maintenance of the remedy. In 2007, Romic established an interim financial assurance mechanism in the form of a surety bond worth \$1.5 million dollars. U.S. EPA has selected a final soil and ground water cleanup remedy for the facility. The estimated cost of the final remedy is \$2.5 million. Within 60 days after U.S. EPA selects the final remedy, Romic will be required to increase the amount of the existing surety bond or obtain another mechanism with a value of \$2.5 million.

U.S. EPA will evaluate the appropriate levels of financial assurance as new information is obtained. If U.S. EPA determines that \$2.5 million dollars is not adequate, additional financial assurance will be required. For example, Romic will conduct a site wide subsurface investigation after closure and removal of all aboveground permitted units. This investigation will identify the nature and extent of contamination across the site, including beneath the process

plant and other structures. Romic will use this information to develop a plan for implementing the final remedy selected by U.S. EPA. This plan, called a Corrective Measures Implementation Plan or CMIP, will describe the approach and details of how the facility will be cleaned up. Included in the CMIP will be an updated cost estimate that reflects the findings of the site wide subsurface investigation. If the updated cost estimate exceeds \$2.5 million, U.S. EPA will require Romic to increase the level of financial assurance to equal the latest cost estimate. Romic's updated cost estimate will include a contingency factor. The final remedy does not require Romic to obtain Cleanup Cost Cap insurance because Romic already has established financial assurance through a surety bond.

# The following two comments raise similar concerns and are addressed in a single U.S. EPA response:

### Comment 6.5. Third Party Review of Cost Estimate and Cost Overrun Contingency

The financial assurance section of the cleanup plan requires Romic to post a surety bond for the cost for the selected remedy. A third party should review the cost estimate for the remediation and an inflation factor or cost overrun contingency should be added to the value of the surety bond. I suggest a minimum of cost plus 10%-15%, a standard within the construction industry when dealing with below ground costs. In addition, the City of East Palo Alto should be a named an additional beneficiary on the surety bond. Lastly, the bond should stay in place for several years after the cleanup has been completed in anticipation of unforeseen contamination surfacing after completion. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

Comment 6.6. What is the Process if Cleanup Costs are Higher than Financial Assurance?

What is the process if the proposed clean up plan is not effective and/or if the clean up costs are higher than the present estimated financial assurance bonds? Will USEPA make any change of plans part of the bond? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comments 6.5 and 6.6:** The cost estimate for the site cleanup is \$2.5 million. Under the U.S. EPA Remedy Decision, Romic is required to pay for the cleanup of the former facility and, in addition, set aside funding equivalent to another \$2.5 million as financial assurance.

U.S. EPA will evaluate the adequacy of the cost estimate for completing the site cleanup. If U.S. EPA determines that the cost estimate is not adequate, Romic will be required to revise the estimate.

The City of East Palo Alto cannot be named as a beneficiary of the surety bond. U.S. EPA is the regulatory agency responsible for cleaning up the site contamination if Romic should default on its obligation to complete corrective action. U.S. EPA would use the money from the surety bond to complete the cleanup of the facility.

The financial assurance mechanism will stay in place or be adjusted based on a determination from U.S. EPA.. The first step in the process requires Romic to prepare a petition to U.S. EPA requesting that the level of financial assurance be reduced based on the work completed. The petition will document Romic's rationale for making the request.

U.S. EPA will then evaluate the petition and coordinate with the other involved agencies. In general, U.S. EPA will use the following guiding principles to evaluate Romic's petition and make a determination:

- The level of financial assurance should be consistent with the anticipated costs of future monitoring, operation and maintenance, and/or remediation work that still needs to be completed.
- The level of financial assurance for operation and maintenance of remediation systems should be maintained for sometime after the system or portions of the system are shutdown to allow sufficient time to evaluate potential rebound effects. For example, financial assurance for the enhanced biological treatment of contaminated ground water and soil at Romic should remain in place for sometime (2-3 years) after the treatment system or portions of the system have been shutdown. During this time, ground water monitoring data will be used to assess whether contaminant concentrations are increasing or decreasing. If contaminant concentrations show an increasing trend after system shutdown, then further action will be needed (e.g., restart active treatment).

If the final remedy to address subsurface soil and ground water contamination is not effective, U.S. EPA will require that Romic evaluate and develop a new cleanup plan. U.S. EPA would solicit community input on any new cleanup plan for the facility.

# The following two comments raise similar concerns and are addressed in a single U.S. EPA response:

Comment 6.7. Minimum Cleanup Costs

What is minimum cost per square foot to clean up the land? (D. Tschang (Chang), Resident, East Palo Alto, California, U.S. EPA Comment Form, October 10, 2007 Open House, Public Meeting and Public Hearing)

Comment 6.8. Cleanup Costs for Best Cleanup

Best cleanup – cost per square foot. (D. Tschang (Chang), Resident, East Palo Alto, California, U.S. EPA Comment Form, October 10, 2007 Open House, Public Meeting and Public Hearing)

**Response to Comments 6.7 and 6.8:** U.S. EPA does not have data on the minimum or maximum costs for the site cleanup. There are only estimated costs that are used for financial assurance.

Comment 6.9. Pollution Legal Liability and Cleanup Cost Cap Insurance

Did Romic carry Pollution Legal Liability Insurance? If it did, mention the type and amount of coverage, and clarify whether or not it covers the cost of the existing and or potential contamination on the Infinity parcel. Please attach a copy of the Certificate of Insurance. Will Romic and/or its successors be required to purchase Clean-up Cost Cap Insurance to ensure sufficient funds to clean up the affected areas? Consider adding Cost Cap insurance as an additional Financial Assurance. (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

**Response to Comment 6.9:** Romic does carry Sudden Pollution Legal Liability Insurance (SPLLI). The SPLLI covers third party damage from environmental releases at the facility. The level of SPLLI insurance is \$1 million dollars per occurrence and \$2 million dollars aggregate which is sufficient to meet the permit/closure requirements of DTSC. There is no requirement from U.S. EPA for SPLLI for the site cleanup.

Clean-up Cost Cap Insurance is a type of insurance that may be used to fulfill financial assurance requirements. Romic has chosen instead to use the surety bond to meet its financial assurance obligations. Thus, Romic and/or its successors will not be required to obtain Clean-up Cost Cap Insurance.

U.S. EPA will monitor the appropriate levels of financial assurance as new information is obtained. If increases in the level of financial assurance are warranted, U.S. EPA will require that Romic increase the value of the surety bond that is currently in place or obtain a new mechanism with a higher face value.

## 7. Five Year Remedy Performance Evaluation Reports

# The following two comments raise similar concerns and are addressed in a single U.S. EPA response:

Comment 7.1. If a report is made every 5 years, how long will it continue? Will USEPA continue to monitor in perpetuity? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

Comment 7.2. I have maybe about four or five questions, and my first question is regarding the update report. So, it says on your lovely presentation that the update report will happen every five years. Until when? Until forever? When will the report stop and how is that date determined? Was it just thrown out of the blue or is there a specific reason why your report is going to stop after 10 years, 15 years, 20 years? What is that all about? Okay. (A. Turner, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

**Response to Comments 7.1 and 7.2:** The requirement to submit Five Year Remedy Performance Evaluation Reports (Five Year Reports) will stay in place or be adjusted based on a determination from U.S. EPA. Romic may petition U.S. EPA when it believes that the Five Year Reports are no longer necessary or that the submission schedule needs to be revised. U.S. EPA will evaluate Romic's petition and any supporting documentation. U.S. EPA may consider may factors in making this determination including whether the five remedy performance objectives have been achieved. The five remedy performance objectives are: protect human health and the environment, attain media cleanup objectives, remediate the sources of releases, limit off-site migration of contaminated ground water and limit potential for vapor intrusion into structures. These performance objectives are described in further detail in Section 13, Evaluation of Corrective Action Remedial Alternatives/Recommended Alternative, of the September 2007 Statement of Basis.

### 8. Ground Water Cleanup

# The following five comments raise similar concerns and are addressed in a single U.S. EPA response:

### Comment 8.1. Monitored Natural Attenuation

The remedy proposes using monitored natural attenuation (MNA) to reduce overtime the contaminants in the ground water to the proposed media cleanup objective. According to the SB, "At some point, active remediation will cease and the concentrations of contaminants in ground water will be allowed to attenuate naturally to eventually achieve the media cleanup objectives for restoration of ground water quality."

It is not clear within the remedy when this will occur or what objective standard will be used to determine the commencement of the MNA phase. (At what rate does MNA occur?) Moreover how would one determine the start of the MNA phase if there seems to be an absence of data regarding MNA degradation of the media or any reference to MNA standards in the SB. Without an objective standard as to when to start this process, what would prevent a premature suspension of active bio-remediation and conversion to MNA, thus prolonging the cleanup unnecessarily? (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

#### Comment 8.2. Monitored Natural Attenuation

Please be more specific in explaining when is the "some point" of natural attenuation? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

#### Comment 8.3. Monitored Natural Attenuation

Page 5, 3rd paragraph. Please be more specific at which point active remediation will cease and the standard and/or the threshold that will be used to determine that it is safe. (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

#### Comment 8.4. Monitored Natural Attenuation

I also have two questions that I demand to be answered. My first question is when will the "some point" of natural attenuation will happen? [Note that the second question relates to when the investigation will start in the inaccessible areas and is addressed in the Investigation and Remediation of Inaccessible Areas section of this document.] (A. Alvarez, Youth United for Community Action, October 24, 2007 letter)

Comment 8.5. Monitored Natural Attenuation

Another thing is, is the question that I have is that: When is the some point of natural attenuation will happen? (A. Alvarez, Youth United for Community Action, October 10, 2007 Public Hearing Testimony)

**Response to Comments 8.1, 8.2, 8.3, 8.4 and 8.5:** Enhanced biological treatment will be used together with monitored natural attenuation (MNA) to remediate the soil and ground water. Enhanced biological treatment will first be used to significantly reduce contaminant concentrations and be followed-up with the MNA until the media cleanup objectives are achieved. MNA allows natural processes to reduce contamination in soil and ground water. These processes include biodegradation, dispersion, dilution, sorption, and volatilization. Implementation of monitored natural attenuation typically involves continued monitoring of contaminant concentrations to quantify attenuation rates and progress toward meeting the media cleanup objectives.

In general, U.S. EPA will use the following guiding principles to determine when MNA becomes an appropriate remedial approach:

- Ground water contaminant concentrations in the given area should be reasonably close to their corresponding media cleanup objectives.
- Contaminant concentrations in the ground water should either be decreasing or maintaining a stable level.

If volatile organic compound concentrations begin to increase in the ground water after MNA has been implemented, this suggests that MNA is not effective and may necessitate additional enhanced biological treatment. If trends in the contaminant concentrations show continued declines, this suggests that MNA is working.

# The following two comments raise similar concerns and are addressed in a single U.S. EPA response:

### Comment 8.6. Doubts Effectiveness of Enhanced Biological Treatment

I was born in this community hot-rodded motorcycles and cars since I was ten years-old. I worked at the local auto parts store. I lived here for twenty years. I was born and raised here. I got to know a lot of the homeless people on Bay Road. They would live by the wrecking yards. I

know what they died of. They pretty much faded away. They all died of cancer. What I am trying to get at is I am not sold of this cheese-whey molasses mix that is going to fix everything for East Palo Alto, not at all. I need to be absolutely sure that which is this is going to work. I want to see five litres of the material that you pulled out of ROMIC, the contaminated water and have your cheese whey fix those portions still, because I'm a plumber. I take water to different companies to have it analyzed. I don't know exactly what's in there and if you want to talk about clean drinking water, I can tell you what clean drinking water is and how to make it. So, I need to be sold on this process. I don't want to be hustled or sound like I'm going to be hustled, but right now, I doubt this cheese whey and molasses mix is going to work. I'm doubting it. Prove it to me that it's going to work, that it does work and like and one way to prove it to me, like I say, is pull five litres from, that put a few drops of molasses and whey and show, show me how that's going to fix that and I guess the constant temperature of that soil, I doubt it, I really seriously doubt it. I think we discover the best, the best products you spoke of earlier, whatever it takes. I'm just not sold on that and the community is, pretty much still feels the same. U.S. EPA has now been around for 20 years and all of a sudden it says, well, this is going to work. I can't say that to anybody else here in East Palo Alto that this cheese whey product that you're telling me it's going to work, that you're going to give me all kinds of paperwork that it's going to do this, but when it's hard to discern, I want to know how it works and that it works by me testing that myself. Like I said, I know the places where to take it to find out what's in it when I get it in its raw form, and through the process that you guys say it will work, and how long. let's see, I'll bet it won't work. Thank you. (B. Huerta, Resident, East Palo Alto, California, October 10, 2007 *Public Hearing Testimony*)

Comment 8.7. Documentation of Remedy Effectiveness Needed

One day, some of you folks will understand what I am saying and some of you will not take what we're saying and make it sound stupid, someday. Like Langston Hughes had a poem, said I guess that's going to be me, myself, telling my story and forget all the others. Last year, I think this group came to East Palo Alto and made a presentation on the whey and molasses, what was going on down at Romic. I don't understand why we don't have the results of that, that molasses and whey business. You have been doing it for awhile. You have put down those wells. You have made the presentation to us. We were there. We still have those things you passed out. Why there is no tangible results of the cheese whey and molasses that you can present to our community this year, I don't know. So, we're still here saying, well, does it work? Well, EPA said it works. Well, measurable, it's called qualify, quantify. (K. Evans, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

**Response to Comments 8.6 and 8.7:** Enhanced biological treatment involves injecting a mixture of cheese whey, molasses and water into the solvent-contaminated soil and ground water. The cheese whey and molasses act as a food source for natural microbes that live in the subsurface. These microbes breakdown the solvents into carbon dioxide, water and salt.

The effectiveness of enhanced biological treatment to reduce volatile organic compound concentrations at the former Romic facility has been proved during pilot testing and use at other heavily contaminated areas of the site. For example, volatile organic compound concentrations in monitoring wells located along the eastern (downgradient) boundary of the facility show a

consistent decreasing trend and in some cases are below detection limits. As shown in the following three examples, contaminant levels have significantly decreased as a result of the enhanced biological treatment using cheese whey and molasses injections.

A-zone. Concentrations of Cis-1,2-Dichloroethylene in well RW-2A went from 21,000 ug/L in September 2003 to non-detect at 2.5 ug/L in December 2007. Cheese whey and molasses injections in this area began in 2003.

B-zone. Concentrations of Trichloroethylene in well RW-5B went from 12,000 ug/L in June 2005 to 14 ug/L in December 2007. Cheese why and molasses injections in this area began in 2005.

C-zone. Concentrations of vinyl chloride in well RW-17C went from 2,600 ug/L in December 2005 to 370 ug/L in December 2007. Cheese why and molasses injections in this area began in 2005.

Reference: Third and Fourth Quarter 2007 Semiannual Ground water Monitoring Report, Romic Environmental Technologies Corporation, February 13, 2008

Further quantification of the effectiveness of enhanced biological treatment can be found in the U.S. EPA September 2007 Statement of Basis and the following reports prepared by Romic's consultant Arcadis U.S., Inc.: Pilot Test Status Report, August 21, 2001, Start-up Report – Interim Remedial Measures, May 14, 2004 and Start-up Report - Expansion of the Ground water Interim Remedial Measures, January 28, 2005. These documents are available for viewing at the U.S. EPA information repository for the cleanup plan selection which is located at the East Palo Alto Public Library.

Since enhanced biological treatment needs an anaerobic (low oxygen) environment to work, it is not possible to take a sample of contaminated ground water out of a well and mix it with cheese whey and molasses to confirm that the process works. The anaerobic environment is one without oxygen and is very difficult to recreate out of the natural subsurface conditions.

If the enhanced biological treatment is not effective, U.S. EPA will require that Romic develop a new cleanup plan for addressing soil and ground water contamination beneath the facility.

### Comment 8.8. Enhanced Biological Treatment

In general, the use of in-situ enhanced biological treatment as the preferred remedial technology appears to be a prudent approach. Assuming that this process is as effective at scale as it has been during the limited test phase period, it offers greater protection against off gassing of VOCs into the air and reduces human exposure to those chemicals. Pump and treat technologies would be far less acceptable due to the potential for surface level exposure by residents and workers within the vicinity of the site. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email) **Response to Comment 8.8:** U.S. EPA agrees. Pump and treatment technologies would also be much less effective at cleaning up the contaminated ground water.

### Comment 8.9. Effectiveness of Monitored Natural Attenuation

Lastly, on this issue, there seems to be an internal contradiction within the SB concerning MNA effectiveness. The SB states on page 24, that "...results of the comparison [of sediments] indicate that the concentrations and distribution of VOCs in sediment are similar to concentrations previously observed in the sampling conducted in the early 1990's." This juxtaposition of theory vis-à-vis fact is somewhat alarming. Assuming 15 years have past and no measurable attenuation has occurred, how long would it take to remediate the ground water by using MNA? The SB is very unclear with regard to this issue. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

**Response to Comment 8.9:** The rate of volatile organic compound degradation in sediments and ground water are not comparable. They are two different media and have different chemical processes affecting the breakdown of contaminants.

Monitoring is a big part of Monitored Natural Attenuation or MNA. Once MNA is in place, U.S. EPA will closely evaluate future monitoring data to identify any trends. If volatile organic compound concentrations begin to increase in the ground water after MNA has been implemented, this suggests that MNA is not effective and may necessitate additional enhanced biological treatment. If trends in the contaminant concentrations show continued declines, this suggests that MNA is working.

### 9. Investigation and Remediation of Inaccessible Areas

# The following six comments raise similar concerns and are addressed in a single U.S. EPA response:

### Comment 9.1. Removal of Structures and Site Cleanup

Based on the need for additional investigation in inaccessible areas, the proposed remedy should call for, at a minimum, the razing of those structures that are within the three primary contaminated areas identified in the SB: the former pond area, the central processing area, and the southwest storage area.

Again, it seems counterintuitive to approve the proposed remedy when that very document appears incomplete unless these areas have been fully investigated. Conditioning the approval of the SB on the demolition and removal of the structures within or near the contaminated areas would incentivize Romic to move quickly in that direction. Ideally, the buildings should be removed before Phase 2 begins. U.S. EPA should mandate that. Alternatively, the structures should be completely removed during the closure period in order to ascertain the full extent of the contamination. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

#### Comment 9.2. Removal of Facility Structures and Site Cleanup

Figure 5 on page 17 and figure 2 on page 11 of the SB illustrate the extent of existing contamination and potential contamination, respectively, on the site. As noted earlier in these comments, the three primary contaminated or potentially contaminated areas per these illustrations are the former pond area, the central processing area, and the southwest storage area. All of these areas have structures above them. The remedy will be incomplete or at a minimum significantly delayed unless it requires the removal of any structures above or next to these areas. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

Comment 9.3. Removal of Facility Structures and Site Cleanup

First of all, a closed site is not clean until it's flat. In order for the Romic facility to be clean, all the buildings on this land need to be removed so that proper testing and clean-up can occur all over this property. Chris Stampolis, Director of Government and Community Relations at Romic, has told our community, "A closed site is not necessarily a flat site."But, phase 2 of the clean-up REQUIRES tear-down of the buildings in order to drill and conduct testing. Page 32 of the "Statement of Basis" reads: "Phase 2 remediation is directed at currently inaccessible areas that become available either during or after Facility Closure." Therefore, the clean-up and the teardown of the buildings have to be gone by the time Phase 2 begins. How would USEPA respond to Mr. Stampolis' assertion? What actions will USEPA take to enforce this, especially since Mr. Stampolis is informing the community about their plans? (M. Cruz, Youth United for Community Action, Resident City of East Palo Alto, California, October 22, 2007 letter)

Comment 9.4. Removal of Facility Structures and Site Cleanup

We want to see it nothing and ugly site is a not a flat site. A closed site is not cleaned up until it's flat. So, in order for this site to be cleaned, all of the buildings from this land need to be removed so that testing and cleanup can occur all over this property. Chris Stamplis has told the community that a closed site is not a flat site, but phase two of the cleanup requires that teardown of buildings in order to drill and conduct testing and cleanup buildings are supposed to be gone by then. How would you respond to Chris? And how is this going to be enforced? In the history section you said that the most contaminated areas are where this building stands on. So, how would you clean this site if the buildings are there? I would like you guys to address my concerns in the cleaning part and it's logical that there should be no buildings on this site to be left there and we would like to see that site like this with no ROMIC there, no buildings. Thanks. (M. Cruz, Youth United for Community Action, Resident, East Palo Alto, California, October 10, 2007Public Hearing Testimony)

Comment 9.5. Removal of Facility Structures and Site Cleanup

In the Operations History Section, it states that:

Past releases of hazardous wastes (e.g., spent solvents) and/or hazardous constituents from the central processing area, former drum storage areas and former wastewater receiving

ponds have impacted soil and ground water at the Facility. These releases have occurred as a result of accidental spills, tank and container overfills, flooding events, and breaks in pipes. In addition, a trough connecting the central process area and the former wastewater receiving ponds also may have acted as a source of contamination.

It further states that:

Many of these potential sources of contamination have been investigated as part of previous Facility investigations; however, those that have not yet been evaluated, such as the Administration/Laboratory Building Septic Tank and Drainfield, will be evaluated during or following implementation of the Facility Closure Plan.

Therefore, potentially, the most contaminated areas of the Romic site are where these buildings are located. So, how would USEPA proceed to clean this site if the buildings were there?

I would like for you to address my concerns in the clean-up section of your report. It's only logical that there should be no buildings on this site in order for the Romic land to be cleaned thoroughly. (M. Cruz, Youth United for Community Action, Resident City of East Palo Alto, California, October 22, 2007 letter)

Comment 9.6. Removal of Facility Structures and Site Cleanup

A clean site is a flat site. The report contains the least amount of information on the most contaminated areas. It also says that the most contaminated areas are directly under current structures. But the report does not spell out if these structures will be removed. Thus, a clean site is a flat site. These structures must be removed in order to conduct testing and perform clean up. (B. Naranjo, Resident, East Palo Alto, California, October 24, 2007 letter)

## Response to Comments 9.1, 9.2, 9.3, 9.4, 9.5 and 9.6:

It is U.S. EPA's current understanding that all structures and units on the former Romic facility property will eventually be removed. However, this may change. The Closure Plan addresses Decontamination, Disassembly and Disposal (DD&D) of the aboveground permitted hazardous waste management units (i.e. tanks, distillation towers). Please refer to the DTSC Closure Plan for details on how this will occur. DTSC is the lead regulatory agency for closure of the former facility. Removal of non permitted units such as office buildings is on a strictly voluntary basis since they are not part of the Closure Plan.

# The following five comments raise similar concerns and are addressed in a single U.S. EPA response:

## Comment 9.7. Soil Excavation and Removal

The extent of soils off-hauling activity is also contingent on the Phase 2 investigations. Off gassing of additional contaminants that may be found in the soil below the three primary inaccessible contaminated areas is also of concern. The City and residents should be informed

of the results of Phase 2 investigations and the respective remedy that will be used once the investigation is completed.

Also of concern is the toxicity of the 3100 cubic yards of soil proposed to be removed and any off-gassing that may occur during the process of staging and transportation. In addition, with the potential for additional excavated soil to be removed from the site during Phase 2, the SB should define in more precise language how this excavation and off-hauling process will be conducted. At present the SB states only that it " shall be managed in accordance with State and Federal Laws." Additional elucidation is needed. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

### Comment 9.8. Soil Excavation and Removal

My second question is regarding the haul off process, so, if and when U.S. EPA or ROMIC decides to remove some chemicals, specifically within the phase two section while we're examining that unknown territory, if the chemicals have to be removed, what is the process and how will that soil be contained, if it has all those volatile inorganic compounds and how will we be assured that all the soil is going to be contained within the trucks, if not in East Palo Alto? We have had that problem in the past. We just make to sure if it's getting out of here, we just want to make sure it's getting out of here and not to someone's backyard. (A. Turner, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

Comment 9.9. Soil Excavation and Removal

Why has off-haul and excavate the soils been proposed since there are VOC's present? If the change is so significant, is there going to be an addition to the plan and another public hearing? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

Comment 9.10. Community Involvement for Phase 2 Work

The remedy proposes to divide the ground water and soils investigation into two phases. However, the remedy seems incomplete without knowing the results of the Phase 2 investigation. Because Phase 2 entails investigating and remediating currently inaccessible areas of the Romic site, approving this proposed remedy may be premature.

At the very least, U.S. EPA should hold another public hearing to let the City and the community know what has been discovered during the second investigative phase. Ideally, both the City and the community should have an opportunity to comment on the results and the proposed remediation of any new contaminants discovered during Phase 2 investigations. Alternatively, the approval of the remedy could be conditioned on an approved timeline submitted by Romic for removing structures and commencing testing of these inaccessible areas. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

### Comment 9.11. Informing the Community about Investigation Findings

There seems to be the least information on the most contaminated areas of this site because this is where the buildings still are. 1) Former pond areas, 2) central processing areas, 3) Southwest storage areas

What is the plan for informing the Public of what is found once the buildings are removed and the soil and water beneath are tested? Will there be an addendum to the plan and another Public Hearing? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comments 9.7, 9.8, 9.9, 9.10 and 9.11:** The September 2007 Statement of Basis and this Final Remedy Decision provide a conceptual framework for the site cleanup. The conceptual framework calls for using excavation of contaminated soils and enhanced biological treatment to address ground water contamination. The details of how the technologies will be used at the former facility (e.g., location and depths of excavations) will be included in a cleanup plan called a Corrective Measures Implementation Plan (CMIP). Following closure and removal of all permitted units and other structures, Romic will conduct a site wide subsurface investigation to identify areas of contamination. Information from the site wide investigation will be used in conjunction with the conceptual framework to develop the CMIP. Thus, the details of where and how much soil excavation will take place will not be known until Romic completes the site wide subsurface investigation.

The CMIP defines the cleanup work that will be done and all of the safety measures that will be taken to ensure the community and nearby workers are protected during the cleanup process. U.S. EPA will ensure that the CMIP contains measures to mitigate volatile organic compound emissions from excavation of contaminated soils and the transport of such soils off-site. The exact nature of the safety measures are not known at this time since the CMIP has not yet been prepared. U.S. EPA, DTSC and/or RWQCB representatives will be periodically present at the site to observe the field work and ensure that it is being done in accordance with the approved CMIP.

U.S. EPA will keep the community informed throughout the investigation and cleanup process. This effort includes making copies of the site wide investigation report and CMIP available for review by community members. If there are significant changes from the remedy proposed in the September 2007 Statement of Basis, U.S. EPA will propose an amended remedy and solicit public comments.

# The following four comments raise similar concerns and are addressed in a single U.S. EPA response:

Comment 9.12. Timeframe Goals for Phase 2 Investigation and Remediation

According to the SB, "...most contaminated soils (contaminant source areas) are not currently accessible to investigation and remediation." Further on in the paragraph it states "Phase 2

Remediation is directed at currently inaccessible areas that become available either during or after Facility Closure" (pg. 28).

This timing issue poses a conundrum by putting into question the approval of this plan if we do not have the data for most of the contaminated source areas. I believe this is the reason U.S. EPA's is proposing a two-phased remedy. However, this approach makes it difficult for the City and the community to comprehend fully the extent of the cleanup. At a minimum, we would require this data in order to develop an accurate cleanup timeline. If the remedy made some provision for public input into the Phase 2 investigation results, this concern might become less of an issue. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

Comment 9.13. Inaccessible Area Investigation/Remediation

When will the investigations occur in inaccessible areas? How will the work be done? When and how will the Public be notified of this process? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

Comment 9.14. Inaccessible Area Investigation/Remediation

Now, that's a question that I have, and another is that when will the investigation occur in the inaccessible areas, how, when and when the public know about that? (A. Alvarez, Youth United for Community Action, October 10, 2007 Public Hearing Testimony)

Comment 9.15. Inaccessible Area Investigation/Remediation

I also have two questions that I demand to be answered.....And my second question is, when will the investigation start in the inaccessible areas? (A. Alvarez, Youth United for Community Action, October 24, 2007 letter)

**Response to Comments 9.12, 9.13, 9.14 and 9.15:** The investigation of subsurface soil and ground water contamination for the currently inaccessible areas and other parts of the facility will begin <u>after</u> aboveground permitted hazardous waste management units and other structures are removed during the closure process. Romic will prepare a single workplan for investigating the subsurface contamination. The single site wide investigation will satisfy the regulatory requirements of both facility closure and site cleanup.

U.S. EPA will keep the community informed by providing an opportunity for informal public review of the investigation workplan and the cleanup plan called a Corrective Measures Implementation Plan or CMIP (see Response to Comments 11.16 and 11.17 for details). The CMIP defines the cleanup work that will be done and all of the safety measures that will be taken to ensure the community and nearby workers are protected during the cleanup process.

### 10. Land Use Restrictions and Risk Management Plan

# The following five comments raise similar concerns and are addressed in a single U.S. EPA response:

#### Comment 10.1. City Involvement in Land Use Restrictions and Risk Management Plan

Since the City of East Palo Alto through its constitutionally granted police powers is empowered to regulate land use within its city limits, the land use restriction provisions of the Remedy should be developed in consultation with the City's Planning Department and Commission. This latter body serves as the advisor and recommender of land use policy to the City Council and implementer of those policies adopted by the Council. In addition, the City of East Palo Alto should be a third party to the oversight and enforcement of these covenants. Lastly, revisions to the land use covenants should trigger a noticed public hearing that would again require City participation in the review process.

Related to the issue of land use restrictions on the Romic land is the Risk Management Plan (RMP) that will be required before any development activity may occur on the site. Again, the City should be a party to the review and approval of any RMP plans. It should be the obligation of the developer or proponent of the RMP to pay for all costs associated with administrative review or revision of any proposed plan. (C. Romero, Vice-Chair, East Palo Alto Planning Commission

#### Comment 10.2. Approval of Risk Management Plan

The Remedy wording as to which agency approves the RMP is ambiguous. It states, "a Risk Management Plan (RMP) is prepared for the specific project and is approved in writing by U.S. EPA or DTSC." Some clarification is required. Under what circumstances would the respective agencies approve the plan? Is only one agency approval necessary? Again, regardless of whether it is DTSC or U.S. EPA or both that approve the plan, the City of East Palo Alto should play a role in this process. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

Comment 10.3. Covenant to Restrict Use of Property

You are proposing to restrict future land use through a "Covenant to Restrict Use of Property". How is your agency working with the City of East Palo Alto<sup>1</sup>s Planning Commission, Planning Department, and City Council to ensure that the land use fits the future plans of the area? (C. Domingo, Youth United for Community Action, November 1, 2007 email)

Comment 10.4. City Review of Covenant to Restrict Use of Property

USEPA wants to restrict future land use through a "Covenant to Restrict Use of Property". The proposed remedy must include "land use restrictions with a risk management plan". We believe that the City of East Palo Alto must be one of the agencies that reviews and approves any such covenants. The City of East Palo Alto must insure that this process actually works due to its

implications for the success of the Ravenswood Business District. We want to insure that there are no 'unilateral' covenants to restrict uses of the property so that they function as a 'crutch' to evade the total clean up by Romic, DTSC, and/or USEPA. (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

Comment 10.5. Future Development

I'm Lorraine Holmes. I have lived in the community since 1958. I have seen the good, the bad and the ugly and let me tell you I live in Gardens and that's what it was. It was the Gardens. You couldn't park a vehicle on the street when I moved here. You had a two-car garage and twocar driveway. That's where you parked your vehicles. You couldn't have a commercial truck in the residential area. I am here representing the seniors of East Palo Alto. Like I say, the air was good when I moved here and throughout the years. Then, with the people coming in, vehicles coming in, pollution business and everything like that, but the worse thing you could ever do is compromise your health for the almighty dollar. It's not worth it, and like I say, you know, and I'm taking your word as faith, you know, that you will clean all this up. Once chemicals are put into the ground, you can't clean them up. Have you ever tried to cleanup a bleach stain once it stains something? You can't do it. You can hope it goes away. We got a lot of churches here. We'll pray it goes away, but that's it. What we need to have is an understanding with any developer that comes in here is that the community has to be first and foremost informed about their intentions, nothing underneath the cover, because sooner or later whatever is underneath the cover is going to come out. Thank you. (L. Holmes, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

**Response to Comments 10.1, 10.2, 10.3, 10.4 and 10.5:** U.S. EPA has and will continue to consult with the City of East Palo Alto on all aspects of the cleanup including the Covenant to Restrict Use of Property (Covenant).

U.S. EPA and DTSC are the regulatory agencies responsible overseeing the facility closure and site cleanup of soil and ground water contamination. As such, it is the role of U.S. EPA and DTSC to be responsible for enforcement of the Covenant which is part of the final remedy for the site. The City of East Palo Alto has ultimate legal authority through the land use permitting process to approve any redevelopment of the Romic property.

U.S. EPA will ensure that the community is informed about any actions related to the Covenant and Risk Management Plan (RMP). See the U.S. EPA Response to Comments 11.16 and 11.17 for details on how U.S. EPA will involve the community for possible changes to the Covenant.

The Covenant restrictions specify that U.S. EPA or DTSC can approve an RMP. U.S. EPA and DTSC are both parties to the Covenant and as such have authority to approve certain required documents. The language of the Covenant will include a discussion of agency responsibilities.

# The following two comments raise similar concerns and are addressed in a single U.S. EPAresponse:

### **Comment 10.6. Potential Residential Uses**

(Page 6. 1 st Bullet: Page 19, 2nd Paragraph: Page 34.) Are there any conditions under which residential uses would be feasible? What about high density residential uses over a concrete parking podium? If there are conditions under which residential may be allowed, please limit institutional control restrictions accordingly to provide the City the greatest reuse flexibility. (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

Comment 10.7. Day Care Prohibition

Page 7. Would the prohibition on day care include a day care center located within a high density office project? (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

**Response to Comments 10.6 and 10.7:** The land use restrictions may, with U.S. EPA or DTSC approval, be revised if site conditions should change in the future and/or if a Risk Management Plan (RMP) indicates different land uses are acceptable.

The land use restrictions such as the prohibition for residential development or for a day care center are subject to change through the variance provisions of the Covenant to Restrict Use of the Property (Covenant). If the RMP risk analysis indicates that the property is suitable for residential development, the owner or the occupant (with owners written permission) may apply for a variance to the residential development or day care center restriction.

A RMP is required by the Covenant for any future redevelopment of the Romic property. The RMP will evaluate the potential health impacts for a proposed redevelopment project and identify possible mitigation measures after the cleanup process has been completed at the site. The RMP will identify, at a minimum, the previous site history, the nature and extent of contamination from all media, the potential pathways of human exposure, estimates of health impacts from existing site contamination, and practical ways to mitigate the impacts for the specific project. The Covenant and the RMP work together to ensure that potential impacts from exposure to contaminated soils, ground water or other media are managed in a manner that is protective of human health and the environment.

## Comment 10.8. Revision of Land Use Covenant

Who will actually be responsible for revising the land use covenant of the property and what are the principles by which these can be revised? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comment 10.8:** The proposed remedy did not include the exact language that will appear in the Covenant to Restrict Use of the Property (Covenant). The specific language for the Covenant will be developed after U.S. EPA selects the final remedy.

Typically, the Covenant will include variance and termination provisions that specify how the Covenant can be revised or terminated. These provisions usually indicate that the property owner or occupant (with the owners written consent) can apply for a variance to certain requirements or for termination of the Covenant.

U.S. EPA or DTSC can approve a variance and/or termination of the Covenant. The Covenant refers to U.S. EPA or DTSC for the approval of certain documents. U.S. EPA and DTSC are both parties to the Covenant and as such have authority to approve certain required documents. The language of the Covenant will be revised to include a discussion of agency responsibilities.

U.S. EPA and DTSC will consider the rationale, supporting documentation, findings of a Risk Management Plan, input from the other regulatory agencies and input from the community in making a decision on whether to approve an application for a variance or for termination of the Covenant.

### 11. Media Cleanup Objectives

The following seven comments raise similar concerns and are addressed in a single U.S. EPA response:

*Comment 11.1. Ground Water Cleanup Objectives, Maximum Contaminant Levels for Drinking Water* 

One media clean up objective is for the contaminated ground water to reach "Maximum Levels for Drinking Water". Why maximum and not minimum levels of threshold? You say you strive for the stringent levels for aquatic habitat protection. (C. Domingo, Youth United for Community Action, November 1, 2007 email)

*Comment 11.2. Ground Water Cleanup Objectives, Maximum Contaminant Levels for Drinking Water* 

One media clean up objective is for the contaminated ground water to reach Maximum Levels for Drinking Water". Why maximum threshold levels and not minimum levels of threshold? It appears that USEPA is striving for the most stringent levels for aquatic habitat protection, but are not intending to clean up the ground water contamination all the way. When you review the list of chemicals that are present and potentially could invade the ground water, you will notice how deleterious they are for human use of any kind. "All residual contamination may remain in soil and ground water." However Maximum Cleanup Levels are supposed to "Take into account a chemical's health risks and include a high margin of safety for the public." Please define the wording of "the contaminated ground water to reach <u>"MAXIMUM</u> Levels for Drinking water. (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter) *Comment 11.3. Ground Water Cleanup Objectives, Maximum Contaminant Levels for Drinking Water* 

Secondly, in Section 10.1 Cleanup Objectives, you report that the USEPA is considering cleaning the water underneath Romic to the "strictest levels". You write:

Maximum Contaminant Levels for drinking water are proposed as the site-wide cleanup objective for all ground water at the Facility.

Why is East Palo Alto being cleaned to the lowest standards of drinking water? Why are we being screwed and why is our community being put through all this again? How would you feel if you were in our position? In my opinion, the ground water is not clean until you and your staff at USEPA are able to drink the water and let this water quench your thirst on a hot summer day. (G. Mena, Youth United for Community Action, October 23, 2007 letter)

*Comment 11.4. Ground Water Cleanup Objectives, Maximum Contaminant Levels for Drinking Water* 

So, if it's not drinking water, then just say that. It's not a source and it doesn't have potential. So, if it has potential, then riddle me this: This is the straight contamination of the water, and this is the potential drinking water that Ron said that we could get to. In the level, this is just levels of dirty drinking water (indicating), and this is the cleanest drinking water. East Palo Alto is here, right now, at this point, but what U.S. EPA is just trying to bring us up to here. Now, my question was: Why are we being clean to the lowest standard? Right? Just as the young lady in the back over there, she said that we're tired of being screwed, even though that's not the right word, or a nice word, we're tired of being screwed. So, since the drinking water is the lowest standard and it is potentially a drinking source, this is the water from the bay in East Palo Alto, so, and this is the tap water that we got from our office. Which one would you drink? You know, and I would like you to have this. MR. ARMANN: Thank you. GABRIEL: You're welcome. Take a sip." (Gabriel, Youth United for Community Action, October 10, 2007 Public Hearing Testimony)

*Comment 11.5. Ground Water Cleanup Objectives, Maximum Contaminant Levels for Drinking Water* 

Why isn't the goal for fully cleaned water as opposed to the dirtiest that humans can 'tolerate"? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

Comment 11.6. Media Cleanup Objectives for Ground water

In the section of Development of Corrective Action the three approaches to cleaning the site are laid out. They are:

1. Nothing

- 2. Excavation of soil under building part of closure, not after
- 3. Bio-Remediation (no extraction in this alternative)

We believe that the level of cleanliness of the ground water should be based on measurable objective standards. What are the standards? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

Comment 11.7. Maximum Contaminant Levels

More stringent MCL's (Maximum Contaminant\_Levels) are required. There can be NO contamination of drinking water. (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comments 11.1, 11.2, 11.3, 11.4, 11.5, 11.6 and 11.7:** U.S. EPA proposed Maximum Contaminant Levels (MCLs) for drinking water as the site-wide media cleanup objective for all ground water at the former Romic facility. U.S. EPA Preliminary Remediation Goals (PRGs) were proposed when there were no MCLs available for a given contaminant.

The MCLs are very stringent standards that are used almost universally as ground water cleanup goals for every U.S. EPA Superfund and Resource Conservation and Recovery Act (RCRA) remediation site in the country.

MCLs mean the maximum permissible level of a contaminant in water delivered to any user of a public water supply system. MCLs are enforceable standards for drinking water. Primary MCLs take in to account a chemical's health impacts.

The majority of drinking water supplied to East Palo Alto residents and businesses is provided by the San Francisco Hetch Hetchy system, which originates in the Sierra Nevada Mountains. All of the drinking water supplied to East Palo Alto meets the MCL standards. There is no such thing as minimum contaminant levels.

# The following four comments raise the same concern and are addressed in a single U.S. EPA response.

Comment 11.8. Ground Water Use

First of all, you as the United States Environmental Protection Agency need to be more clear in your report. In Section 10.1 Cleanup Objectives, you write:

Ground water at the Facility is salty due to the close proximity to the San Francisco Bay. Thus, the ground water at the Facility is not currently being used as a drinking water supply and is not likely to be used for this purpose in the future. Ground water is brackish (salty) and unsuitable as a drinking water source.

However, later, in Section 10.1 Clean up Objectives, you then further write:

However, the ground water at the Facility is subject to the requirements of California's Porter-Cologne Water Quality Control Act and the San Francisco Bay Regional Water

Quality Control Board's ("RWQCB") Basin Plan, which mandates the protection of waters of the state for beneficial uses including use <u>as a potential drinking water source.</u>

WHICH ONE IS IT? Is the water under Romic NOT a drinking source or a POTENTIAL drinking source? We don't want it to be a drinking source at all because it is toxic and hazardous to East Palo Alto residents, and for any human for that matter. (G. Mena, Youth United for Community Action, October 23, 2007 letter)

Comment 11.9. Ground Water Use

......what brings me here tonight was the basis in proposed soil and ground water remedy in regards to the level of ground water cleanup. So, I'm just going to go through this step by step so everyone can get the idea. So, basically, this is ROMIC and this is all their toxics, and basically, these are the wells that they injected the cheese-whey into the contaminated water, and when I had read the report and how Ron Leach has said that it is potentially can become drinking water, but it also said in the report that the water is too dirty to drink. So, one of my questions was: Which one was it? So, if it's not drinking water, then just say that. It's not a source and it doesn't have potential. (Gabriel, Youth United for Community Action, October 10, 2007 Public Hearing Testimony)

Comment 11.10. Ground Water Use

At one point the discussion says that the ground water to be remediated is not part of the local drinking water. At this point in discussion it is as though the ground water to be remediated DOES become part of the aquifers that serve as local drinking water. Which is it? (S. Webster,

K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

Comment 11.11. Ground Water Use and Cleanup Objectives

Some clarification is called for in this section regarding ground water cleanup objectives. The SB states that the ground water at the site is to be cleaned to maximum contaminant levels allowed for drinking water. However, elsewhere in the document the SB states that the ground water below the site is brackish and unsuitable for drinking. Will this water ever be deemed a drinking/potable water source? If the answer to this question is no, then a qualifying statement

to that extent should accompany the ground water media cleanup to avoid confusion among the public. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

**Response to Comments 11.8, 11.9, 11.10 and 11.11:** The ground water down to a depth of approximately 80 feet beneath the former Romic facility is not and probably will never be used as a source of drinking water. However, the ground water is designated as a potential drinking water source by the California's Porter-Cologne Water Quality Control Act and the RWQCB Basin Plan, which mandates the protection of waters of the state for beneficial uses. The ground water, due to its close proximity to San Francisco Bay, is unsuitable for nearly every purpose due to its high salt content.

Total Dissolved Solids (TDS) is a measure of the salt content of water. The maximum recommended TDS for drinking water is 500 milligrams per liter (mg/L). TDS in the A, B, and C ground water zones beneath the former facility exceeds not only the recommended TDS drinking water limit, but approaches (or exceeds) the TDS of seawater. TDS at Romic ranges from 1,200 mg/L to 36,000 mg/L. Seawater ranges from 30,000 to 40,000mg/L. South San Francisco Bay TDS ranges from 20,000 to 30,000 mg/L.

The ground water is heavily contaminated with volatile organic compounds and must be remediated such that the media cleanup objectives (Maximum Contaminant Levels) are achieved. Even if the media cleanup objectives are achieved, the ground water is still too salty to use as a drinking water supply without extensive treatment for human consumption.

The land use restrictions prohibit the extraction of ground water beneath the former Romic facility, except for purposes of ground water monitoring, site remediation or construction dewatering. The land use restrictions are contained in The Covenant to Restrict Land Use of the Property (Covenant).

# The following two comments raise similar concerns and are addressed in a single U.S. EPA response:

## Comment 11.12. Surface Estuarine Screening Levels

One media cleanup objective says that the Surface Estuarine Screening Levels are most stringent levels for aquatic habitat protection. In the glossary, it says that these ESL<sup>1</sup>s are based on a target "excess cancer risk of one in a million. This represents the upper (most health protective) end of the potentially acceptable range of in ten thousand to one in a million recommended by the US EPA for contemplating the remediation of sites.)" Given East Palo Alto has the highest cancer rates in all of San Mateo County, how will USEPA account for that? Your target risk assessments exist in a vacuum - which would be great if we all lived in one but we don<sup>1</sup>t. (C. Domingo, Youth United for Community Action, November 1, 2007 email) Comment 11.13. Surface Estuarine Screening Levels

One media cleanup objective says that the Surface Estuarine Screening Levels are most stringent levels for aquatic habitat protection. In the glossary, it says that these ESL's are based on a target "excess cancer risk of one in a million. This represents the upper (most health protective) end of the potentially acceptable range in ten thousand to one in a million recommended by the US EPA for contemplating the remediation of sites.)" Given East Palo Alto has higher cancer rates in all of San Mateo County, how will USEPA account for these differences? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comments 11.12 and 11.13:** The estuarine screening levels are used to protect biota in the surface water of the sloughs near the former Romic site. The "excess cancer risk of one in a million" statement in the glossary of the U.S. EPA September 2007 Statement of Basis refers to human carcinogens and is not applicable to the estuarine screening levels which are ecologically based action levels.

# The following two comments raise the same concern and are addressed in a single U.S. EPA response.

Comment 11.14. Ground Water Cleanup Objectives – Cumulative Effects of Chemicals

In the Media Cleanup Objectives Section one of the stated goals set by USEPA is to cleanup the drinking water to a level that is one in one million chances of cancer risk.

Please explain why the cumulative effects of the chemicals in the ground water were not taken into account in this discussion. It seems that USEPA left that out of the equation when assessing the cancer risks. (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

Comment 11.15. Cumulative Effects of Chemicals in Ground Water

Before I go off, I just wanted to say: So, why didn't ROMIC take into account the cumulative effects of the chemicals in the ground water when mentioning the cancerous? (Gabriel, Youth United for Community Action, October 10, 2007 Public Hearing Testimony)

**Response to Comments 11.14 and 11.15:** U.S. EPA proposed Maximum Contaminant Levels (MCLs) for drinking water as the site-wide media cleanup objective for all ground water at the former Romic facility. The ground water media cleanup objectives are the lowest of the California EPA Primary MCLs for drinking water based on toxicity and Secondary MCLs based on taste and odor. U.S. EPA Preliminary Remediation Goals (PRGs) were proposed for four of the 26 volatile organic compounds known to be present at the site since there were no MCLs available for those contaminants.

MCLs mean the maximum permissible level of a contaminant in water delivered to any user of a public water supply system. MCLs are enforceable standards for drinking water that are promulgated through a formal rulemaking process that includes a scientific peer review and public comments. Primary MCLs take in to account a chemical's health risks.

The proposed PRG based media cleanup objectives were developed based on a "one in a million cancer risk" for carcinogenic compounds and a hazard index of 1 for non carcinogenic compounds. It should be noted that ground water impacted by the Romic facility will not be consumed as drinking water. Because the likelihood of developing health impacts from consuming contaminated drinking water is largely contingent upon ingestion of that water, the fact that this ground water is not consumed by humans indicates that there will be no health impacts from either individual or multiple chemical constituents in the water. If, for any reason, the ground water underlying the former Romic facility becomes a source of drinking water, the cumulative impacts from direct ingestion to multiple contaminants will be assessed in a Risk Management Plan (RMP) to ensure the water is safe and does not present an unacceptable level of impact for consumers.

# The following two comments raise the same concern and are addressed in a single U.S. EPA response.

## Comment 11.16. Achievement of Media Cleanup Objectives

According to the SB, "Romic may petition U.S. EPA or the California agencies overseeing implementation of the remedy when it believes that the media cleanup objectives have been achieved in all or part of the Facility" (pg.28). The review process for these petitions should be strengthened to allow for City and community review and oversight of the assumption that cleanup objectives have been met. By making the City a party to the petition review, greater public scrutiny is achieved. Alternatively, an explicit provision for a private right of action to challenge this process would allow the community to engage in this process if they feel the remediation is not complete. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

Comment 11.17. Achievement of Media Cleanup Objectives – Romic Petition

Page 28, 10.3 Romic Petition. The language must be amended to include 1) a specific U.S. EPA established milestone or measurable media clean up objective, and 2) notification to the City of East Palo Alto, and a public notification and participation process. (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

**Response to Comments 11.16 and 11.17:** Romic may petition U.S. EPA to (1) cease or reduce active treatment, (2) make contingency changes to the final remedy and/or (3) make significant adjustments to the remedy implementation. For example, Romic may petition U.S. EPA when it believes that monitored natural attenuation will be sufficient to meet the media cleanup objectives. The petition must include a rationale, data and other information that supports Romic's request. U.S. EPA will evaluate Romic's petition and determine if it is acceptable at that time.

U.S. EPA will take the following actions to ensure that the community is informed about any petitions that seek to cease or reduce active treatment, make significant contingency changes, make significant adjustments to the remedy implementation, revise the Covenant to Restrict Use of Property (Covenant) and about any Risk Management Plan's (RMP) received for a redevelopment project.

- The City of East Palo Alto will be consulted regarding any petition(s) that seek to cease or reduce active treatment, make significant contingency changes, make significant adjustments to the remedy implementation and/or any RMP received for a proposed redevelopment project.
- The City of East Palo Alto will be added to the list of agencies to receive any notices that are part of the Covenant.
- Copies of petitions that seek to cease or reduce active treatment, make significant contingency changes, and/or make significant adjustments to the remedy implementation will be made available for public review.
- Copies of the any RMPs submitted by potential developers will be made available for public review.
- The community will be informed through fact sheets, notices, emails or by other appropriate means of any petition that seeks to cease or reduce active treatment, make significant contingency changes, make significant adjustments to the remedy implementation, revise the Covenant and/or consider a RMP for approval.
- Informal community meetings may be held to discuss any petitions that seek to cease or reduce active treatment, make significant contingency changes, make significant adjustments to the remedy implementation, revise the Covenant and/or consider a RMP for approval if there is sufficient interest from the community for such a gathering.

## Comment 11.18. Residual Contamination

Page 2, 4th paragraph. How much residual contamination will remain in the soil and ground water? Please explain the standard and/or the threshold that will be used to determine that further treatment is not needed or that residual contamination is safe. (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

**Response to Comment 11.18:** The media cleanup objectives for soil and ground water will specify the concentration of contaminants that will be allowed to remain in place after remediation is completed.

The final media cleanup objectives for ground water are the Maximum Contaminant Levels (MCLs) for drinking water (see September 2007 Statement of Basis). The site wide subsurface investigation will include development of media cleanup objectives for soil. The media cleanup objectives will be calculated based on (1) site-specific exposure assumptions specific to

industrial, construction and commercial worker exposure scenarios and (2) cumulative impact from exposure to multiple compounds.

The potential health impacts from this residual contamination will be evaluated in a Risk Management Plan (RMP). U.S. EPA is requiring that a RMP be prepared for any redevelopment of the former Romic facility property. The RMP identifies, at a minimum, the previous site history, the nature and extent of contamination from all media, the potential pathways of receptor exposure and health impacts from existing site contamination, and practical ways to mitigate the impacts for the specific project.

## 12. Miscellaneous

## Comment 12.1. Expedited Site Cleanup

The City of East Palo Alto is eager to facilitate the remediation of the Romic site so that we can protect the environment and our residents and pursue higher and better uses on the Romic site and throughout the Ravenswood. We would like the remediation of the Romic site to occur as quickly as possible. Our comments are intended to facilitate the process so that we can advance our economic development, environmental sustainability, and quality of life objectives. (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

**Response to Comment 12.1:** U.S. EPA agrees and is taking action to effectively coordinate site closure and cleanup such that the property is ready for redevelopment as soon as possible.

Comment 12.2. Slope of Facility

Chris Stampolis told members of the community that the site covered by the buildings is flat. Your information says the "Facility is sloped toward the storm drains." Which is it? Is the facility flat or is it sloped? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comment 12.2:** Portions of the facility are slightly sloped such that rainwater can drain into onsite sumps. The slopes and contours of the facility are likely to be significantly altered by the site closure and cleanup which will involve removal of structures and excavation of contaminated soils.

## Comment 12.3. Size of Former Romic facility

Page 1, 4th paragraph. The Plan says that the Romic site is a 14 acre site. Our records indicate that the Romic site, not including the "buffer" land along Bay Road, is equal to approximately 12.6 acres. Including the buffer area, the Romic site is a 17 acre site. (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

**Response to Comment 12.3:** The comment is correct. The former Romic facility, not including the "buffer" land along Bay Road, is made up of 7 parcels with a total area of 12.58 acres. If the "buffer" area property is included, the total area is 17.2 acres.

Comment 12.4. Size of Process Plant and Drum Storage Areas

What is the area in square feet of the process plant and drum storage areas? (D. Tschang (Chang), Resident, East Palo Alto, California, U.S. EPA Comment Form, October 10, 2007 Open House, Public Meeting and Public Hearing)

**Response to Comment 12.4:** U.S. EPA does not know for certain since the size of the process plant and drum storage areas changed over time. The question does not appear to be relevant to the proposed cleanup plan.

Comment 12.5. Investigation in Public Areas

Also, when will investigation occur in public areas? (A. Turner, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

**Response to Comment 12.5:** The only offsite investigation that will take place is in the slough channel adjacent to the former Romic facility where the contaminated sediments will be further evaluated. U.S. EPA is not planning any other investigations in offsite areas (public areas).

Comment 12.6. Cleanup Permit

It's my understanding that ROMIC was supposed to have a cleanup permit on file. We have not seen ROMIC's cleanup permit. The permit cleanup requirement that every folks have when they leave, we need to see that, too, to see at what level are they applying to the cleanup permit. (P. Evans, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

**Response to Comment 12.6:** The investigation and cleanup work at the former Romic facility is required under an enforceable U.S. EPA Consent Order. In 1988, Romic entered into a RCRA 3008(h) Administrative Order on Consent (Consent Order) with U.S. EPA that required Romic to perform a RCRA Facility Investigation, develop a Corrective Measures Study to evaluate remedial options, and implement a remedy selected by U.S. EPA to correct past releases to the environment from the facility.

## Comment 12.7. Romic Gila River Facility Permit

In terms of I want to speak on another term of, in terms of Gila River in Arizona where the other ROMIC is, where the other ROMIC river is, I understand right now that EPA is in charge of the permit. I also understand that they had a permit, I guess, a community hearing regarding the permit and right now the recommendation is for the permit to be denied. You guys got some community responses or comments from it and would want you guys to understand that we want for you guys to respect the sovereignty of the Tribal Council which they deny the permit for ROMIC in Gila River and for you guys to do the same. ROMIC is not just as bad for EPA, it's

even worse in Gila River and you guys have to respect that. Thank you. (O. Flores, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

**Response to Comment 12.7:** U.S. EPA denied the permit for the Romic Southwest facility located near Chandler, Arizona (Gila River). Waste management activities have ceased and the Chandler facility is undergoing closure on a parallel track with the Romic East Palo Alto facility. For additional information, see the U.S. EPA webpage http://www.epg.gov/region09/waste/romic/index.html.

# The following three comments raise similar concerns and are addressed in a single U.S. EPA response:

## Comment 12.8. Complexity of Statement of Basis

Now, another thing is that, moreover, the chart contains a lot of the numbers that we don't understand and I apologize, but these are some of the charts and if I am just starting to read this report. I don't know if you guys might be able to understand it, but to my eyes, I don't know what this means. I don't know what this means, like, what is all this? Like, I just -- what is this? -you know. It's useless. So, we need things that we are able to understand. You can't just come over here and say tell me right, this information you know, that we can't understand. So, it's things that we are asking from you guys. When you guys make your reports, make them understandable. (A. Alvarez, Youth United for Community Action, October 10, 2007 Public Hearing Testimony)

Comment 12.9. Complexity of Statement of Basis

More over, the chart contains a lot of numbers and we don't know what they mean. This report use a lot of symbols that to our eyes they mean nothing. We go in circles trying to figure what they mean. This is a report to let the people know what's going on with Romic. This is not supposed to be some kind of riddle that one has to try hard to find out what it means. An example would be "parts for millions" or "NA". Or just by looking at the charts that has numbers and symbols I already get lost. (A. Alvarez, Youth United for Community Action, October 24, 2007 letter)

Comment 12.10. Complexity of Statement of Basis

Furthermore, you swear that I, or many others, will be able to understand all those charts in the report. What do they mean? What is the significance? I have always been told that when writing a report, assume the reader has no idea what you are talking about, so you must be as detailed as possible. This report could have been way more detailed. (B. Naranjo, Resident, East Palo Alto, California, October 24, 2007 letter)

**Response to Comments 12.8, 12.9 and 12.10:** The charts and tables included in U.S. EPA's September 2007 Statement of Basis were intended to better explain the proposed cleanup remedy and provide supporting documentation. U.S. EPA did make an effort to ensure that the Statement of Basis was understandable and will continue to do so when writing documents in the

future. Once U.S. EPA selects the final remedy, staff will be available to discuss the selected cleanup plan and any questions from the community.

## **13.** Public Participation

# The following five comments raise similar concerns and are addressed in a single U.S. EPA response:

Comment 13.1. October 10, 2007 U.S. EPA Open House and Public Meeting/Hearing

The Public Hearing your agency held on Wednesday, October 10th, 2007 in the East Palo Alto City Hall was a sham. During the "Question and Answer" session which lasted about an hour, community members expressed many concerns and questions regarding the distrustful nature of your agency and the Romic facility and their deep concerns about the clean-up procedure.

Your agency representatives were allowed to respond to those questions with such ridiculous comments. For example, when a community member asked your staff how contaminated are the untested areas under Romic, one of your agency reps replied about having a "feeling they know how contaminated it is" and that they pretty much know how Romic is. This is despite the fact that the Statement of Basis - which of course is in documented written form -- repeatedly says your agency does not know the true extent of the contamination under Romic. Since when was "feeling they know how contaminated it is" a unit of measurement? The biggest problem with this is that you never clarified to the community that this section was going to be in the "public record". Thus, not only does that give free license for your reps to say whatever you want without accountability, but it doesn't give any teeth into what needs to be addressed in the final clean-up plan. WHY? Because it<sup>1</sup>s not in the public record. I understand there was a "public hearing" portion in which several community members spoke, including myself. However, by that time, some community members who had very intense concerns had left because of their frustration with your agency and your so-called "public participation" which had the appearance of just going through the motions as opposed to being truly dialogue in nature. Nodding your head and putting your finger under your chin doesn<sup>1</sup>t constitute listening. (C. Domingo, Youth United for Community Action, November 1, 2007 email)

Comment 13.2. October 10, 2007 U.S. EPA Open House and Public Meeting/Hearing

I would first like to comment that I thought it was irresponsible on USEPA to not have clarified the agenda at the hearing held on October 10<sup>th</sup>. Many residents were outraged that all questions that were asked were not being documented. People brought up really good concerns and because people were unclear when the "formal" hearing began, it was not recorded. (B. Naranjo, Resident, East Palo Alto, California, October 24, 2007 letter)

Comment 13.3. Open House and Public Meeting/Hearing. I am a community member and a community worker, so and I just want to say, too, that I really hope that U.S. EPA really takes into consideration these comments and gives it as much as time as you gave that lovely question-and-answer period that was not being recorded on the record. So, let's keep that into consideration for now. (A. Turner, Resident, East Palo Alto, California, October 10, 2007

## Public Hearing Testimony)

### Comment 13.4. Open House and Public Meeting/Hearing

In East Palo Alto, we who live here, live here by choice. We love where we live. We love our neighbors. We love our friends. We wouldn't live anyplace else; however, we're the victims of very bad press, and so we have a number of people who come into our community ready to disrespect us. Some of us, you work here. Some of you visit here. Some of you are part of regulatory agencies. Some of you are part of the press, but what we get is disrespect too often. in my culture, there's something called trickeration where you take people and you trick them, and I think that what happened with this question-and-answer period was a bit of trickeration, because a lot of comments that people would have made on the record were made during the question-and-answer period, because it was not clear that what was being said, the questions that were being asked that you were then able to answer were not on the record.

So, I have a bad feeling standing here. I should be feeling okay. I'm here with this agency, they're going to try and listen, but as long as you're going to continue with this kind of a trickeration you see what happens to our trust of you is just more people coming here disrespecting us. Too bad, but that's the way it is, it seems. (K. Evans, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

Comment 13.5. Question and Answer Session of Public Meeting

I did want to make a mention that I thought the question-and-answer portion of tonight's meeting was a great way to lead out comments and nothing was reported. So, I thought that was very smart tactic on U.S. EPA to not record that. (A. Loya, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

**Response to Comments 13.1, 13.2, 13.3, 13.4 and 13.5:** Thank you for your comments and sharing your frustration that some community members may not have been aware that during the public meeting portion of the evening, questions and answers would not be recorded.

U.S. EPA's goal in planning the Open House and Public Meeting/Hearing was to inform the community of U.S. EPA's proposed cleanup plan, create a dialogue with community members to better understand concerns and questions and to formally take public comments on the proposed cleanup plan for the Romic facility.

The meeting agenda included an informal open house with poster boards, a 30 minute presentation followed by a question and answer session and a public hearing where comments were formally taken for the record.

The question and answer session lasted about 15 minutes longer than anticipated due to the volume of questions. U.S. EPA viewed this as positive since answering peoples questions concerning the proposed remedy is an important part of the process.

U.S. EPA made reasonable and good faith efforts to ensure that the community understood that comments would be only recorded during the public hearing portion of the meeting. The U.S. EPA fact sheet which was mailed out to about 800 people and organizations in the East Palo Alto community, the Agenda for the public meeting and hearing which was made available to people as they entered the room and U.S. EPA's introductory remarks for the meeting all stated that formal (recorded) comments on the proposed cleanup plan would only be taken during the public hearing portion of the meeting.

U.S. EPA does not consider the question and answer part of the meeting as public comments because it is a verbal dialogue between the community members and agency representatives. The dialogue involves a back and forth discussion where it may not be clear what is a comment and what is a response. The public hearing format eliminates any confusion regarding the comments and responses. The comments are clearly given, recorded and responded to in writing by the agency.

U.S. EPA organized the public meeting right before the public hearing to allow for discussion and engagement between the community and U.S. EPA on the proposed cleanup plan for Romic. On this matter, U.S. EPA guidance explains that, "public meetings can be especially useful for allowing discussion before a public hearing and can be scheduled immediately before the hearing. Comments made during a public meeting do not become part of the official administrative record as they do during a hearing."

The informal public meeting offers community members the opportunity to discuss issues with the U.S. EPA in an informal way without making a comment. A community member can then choose to make a formal comment during the hearing. U.S. EPA encourages this practice to ensure communities can both discuss the issues comfortably and make formal comments in the same evening. Community members had 22 days following the Open House and Public Meeting/Hearing to submit written comments before the formal public comment period closed on November 1, 2007. However, in the future, U.S. EPA will strive to more clearly delineate the purpose and format of each meeting to the public.

# The following five comments raise similar concerns and are addressed in a single U.S. EPA response:

## Comment 13.6. Appointment of Citizen Oversight Committee

Yes, we need a citizens' oversight committee and maybe they do have to go and get all the proper certifications and go take this, take that. We can do it in here. We've all went to school somewhere. We might not have all the degrees and all the certifications you have, but we can get them. If you got it, we can get it and we can go and be a citizens oversight committee, but if you don't have any respect for us and you don't believe in us, you will continue to play games with us. We don't work all day to come here to this meeting to be played with.

AUDIENCE: Right.

KEISHA EVANS: We need a citizens' oversight committee of some kind and we need to sit down and help you work it out, and the process is not transparent, because we only understand certain points and certain points and certain points. This process has to be transparent or else don't waste our time. Don't waste our time. (K. Evans, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

Comment 13.7. Appointment of Citizen Committee

My concern is the EPA, themselves, in charge of the cleanup. It's like Al Capone judging Al Capone. It's unfortunate that this Agency have repeatedly and deliberately and willfully ignored the people of this community. It's my understanding that ROMIC was supposed to have a cleanup permit on file. We have not seen ROMIC's cleanup permit. The permit cleanup requirement that every folks have when they leave, we need to see that, too, to see at what level are they applying to the cleanup permit. We have very limited almost no confidence in EPA. EPA is the one who violated every effort of integrity and respect of this community. They allowed a serial violator to pollute and destroy our community for year after year and after year and allow them to be self-regulated and these same people here want us to be confident that they will correct this problem. It's unfortunate that they said it's going to take seven years to cleanup this place. We would hope that in the effort of conscience, in the effort of just short of neglect, that deliberately and willfully violated the obligations of this community, that they would appoint a citizen committee in this community to review repeatedly and report to them what's happening. We know that the power that DTSC has, the power that EPA has had has been seriously eroded, has become just almost elementary protecting of a community. EPA has done that deliberately and willfully. We don't trust them. We think they should be run out of town with ROMIC, because they're the one that allowed ROMIC repeatedly not only to violate working conditions, but to murder people. Rodrigo Cruz was murdered<sup>1</sup>, because they refused to buy a \$100.00 mask and that man would be living. Not only did they refuse to buy the mask, this was a repeated violation by ROMIC. So, I would hope that EPA would have to excuse themselves and let a neutral person come in and hold this a citizen committee that would do their job that they didn't do and at least let us see how it's going to happen. The EPA had an opportunity to DTSC to regulate this agency and they refused to do it, and that was at the fault of us and we hoped that EPA would disqualify themselves. We have not protected this community, we have not looked after the people. So, it would be illegal, irregular for us to look over these people. I hope you appoint someone else to come in and look over this project. Thank you. (P. Evans, Resident, *East Palo Alto, California, October 10, 2007 Public Hearing Testimony)* 

<sup>&</sup>lt;sup>1</sup> U.S. EPA made a single revision to the testimony of Mr. Peter Evans in order to correct an error made by the court reporter in the transcript. The revision was made on page 14, line 16 of the transcript: Rodrigo Cruz "is a murderer" was revised to read "was murdered". Esquire Deposition Services, the transcription company, was unable to make this correction in the final transcript. U.S. EPA staff who attended the pubic hearing clearly remember Mr. Evans stating that Rodrigo Cruz was murdered. This was confirmed by Mr. Evans in a telephone conversation with U.S. EPA staff on February 1, 2008. U.S. EPA sent Mr. Evans three emails requesting that he concur in writing on the revision. To date, U.S. EPA has not received a response from Mr. Evans.

#### Comment 13.8. Community Oversight

How can we also best assure that this cleanup and decontamination is consistent because we have friends in Hunter's Point that receive, who has been trying to work with the EPA on cleaning up the Naval shipyard and it's been taking forever. How do we assure this doesn't happen in East Palo Alto? And, also, to expedite the process at Hunter's Point. Also, based on comments made earlier, the U.S. EPA and ROMIC oversight has been less than motherly on other task forces and we need more stringent hands on agencies than we do on businesses. How do we assure to that the community also oversees this process, the people who live here, the people who work here, the people who eat and sleep here everyday. They should also have a role in this process to make sure it's implemented properly because we cannot put our faith in agencies who have been lacking to do so this past year. Thank you. (A. Loya, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

#### Comment 13.9. Informing the Community

Hi, everyone. My name is Vita Deboe and I'm here with YUCA and as a young person, I am very serious about this, and as a, well, we are serious about this and I agree with what some of these people are saying because I actually know, I was born in East Palo Alto. I actually used to live on Bay Road, but now I live on Williard Avenue which is over there (indicating), but what I think is the odd move is because we don't want to worry for all this time. We want to know what's going to happen. People out here are living badly and there is the City is polluted because of what's out there, toxics and all that stuff, and basically, what I am trying to say is will you let us know what is going to happen, let us know what is going to happen and just step up, and that's it. Thank you. (V. Deboe, Youth United for Community Action, October 10, 2007 Public Hearing Testimony)

#### Comment 13.10. Education of Community

My name is David Tschang (Chang). Forget about my name, just remember commission of message. My comment is I will hope that you guys are the ones who can get the thing into a DVD, whatever thing you think can educate our community participation members, and YUCA is our authorized community participation member. Our City Council doesn't represent us. Our developer represents us here, representing developer, so does our planning commission because, nevertheless they don't address the relevant issue. We are very painful that this City has been going through such horrendous, enormous amount of, you know, problem in the developing sense. Redevelopment completely monopolizes all our land and become bedroom and we have nothing left except empty parking lot. We have a lot of empty parking lot because development, basically, you know is they're going to create job by retail people. The retail people cannot give us a good job. A good job is not cranking cash register. So, this is a very serious thing. I am not complaining. I am just telling you the facts. This fact is multiplied by thousands of times. Every city around a big university you have incarcerated city like us and no one is going to lift one single finger. Two miles from Stanford, there is nothing to look at the thing or hear the thing or smell the thing or think about the thing, and this is our last chance. I hope that you people understand that's why I keep mentioning about community participation. They need education. So, I have all the things background. I hope that you give me a chance, too. I got Master's in

Mechanical Engineering. I have an electrical background, BS-1. I also study a lot of chemical engineering. This is going to blast people. I am a serious person. I am running for city counsel. I hope I win. So, the important thing is I hope the court would pay attention to this thing. Make sure we as the community had real participation, not just the developer come here, buy the land cheap. Ultimately, it will get voted out, because of gentrification if we don't do anything. These young people don't need to go back to jail. Okay. Thank you very much. (D. Tschang (Chang), Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

**Response to Comments 13.6, 13.7, 13.8, 13.9 and 13.10:** East Palo Alto residents have the option to form their own Community Advisory Group (CAG). The CAG would meet periodically to discuss issues related to the site cleanup at the former Romic facility. The membership would be made up of voluntary community representatives operating under rules they have developed.

U.S. EPA can assist with organizing an informational meeting to inform the community about how to form and manage a CAG. U.S. EPA would be able to participate in the CAG by offering advice on agendas and attending meetings to listen and answer questions. Please note that while the U.S. EPA is supportive of the community forming a CAG, we are not able to direct the CAG and cannot provide funding for it.

The community may also wish to consider another U.S. EPA program called Technical Assistance Services for Communities (TASC). The TASC pays for an independent consultant to assist communities affected by hazardous waste sites. TASC provides unbiased educational and technical assistance. TASC can help by providing experts to explain hazardous waste problems and U.S. EPA's plans to cleanup a site such as Romic.

U.S. EPA will continue to make workplans available for review by community members and will have informal small group meetings to discuss the plans. We will also keep the community informed about the facility cleanup by mailing out informational fact sheets and having larger public meetings as necessary to discuss the progress of the investigation and remediation effort.

## Comment 13.11. Community Designated Consultant

What is the process whereby a community designated consultant can oversee the process of the cleanup? What qualifications must a consultant have? What activities will the consultant be prevented, if any, from being involved with? Will the consultant receive all requested data, reports and communications? (P. Gardner, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

**Response to Comment 13.11:** The U.S. EPA has a program where communities affected by hazardous waste sites can obtain technical support from an independent consultant. The program is called Technical Assistance Services for Communities (TASC). TASC can help by providing experts to explain hazardous waste problems and U.S. EPA's plans to cleanup a site such as Romic.

As does any member of the community, the consultant would have access to all information and data in the administrative record for the remedy decision. The consultant would be involved with most activities including informational meetings and some internal ones. U.S. EPA may have some internal policy making meetings that are not appropriate for the community consultant to attend.

## Comment 13.12. Proactive Approach for Cleanup

What can we help you to do to be more proactive in this process so that we just don't have to just step back and wait? We have been waiting for 43 years. One day, low and behold, you just came in here and decided to help East Palo Alto out which is not the case. We have been pressuring you and asking you and now that ROMIC is finally closed we're seeing you more often and that's great. We appreciate that, but, you know what? -- we're tired of waiting. We're going to ask that and we're going to ask that you're more proactive in this process. Don't stand in the back. Lead the process. Don't wait for ROMIC, because they're just not going to help you out. Thank you. (A. Turner, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

Response to Comment 13.12: U.S. EPA acknowledges the comment.

Comment 13.13. Reports on DVD

Put report on DVD and distribute to community. (D. Tschang (Chang), Resident, East Palo Alto, California, U.S. EPA Comment Form, October 10, 2007 Open House, Public Meeting and Public Hearing)

**Response to Comment 13.13:** U.S. EPA will put key documents of the remedy decision for Romic in the information repositories located at the East Palo Alto public library and U.S. EPA office in San Francisco. In addition, U.S. EPA will put copies of some key documents on a U.S. EPA webpage for the facility. The key documents will be in PDF format and that can be downloaded.

Comment 14. Public Hearing Transcript

Copy of transcript requested. (D. Tschang (Chang), Resident, East Palo Alto, California, U.S. EPA Comment Form, October 10, 2007 Open House, Public Meeting and Public Hearing)

**Response to Comment 13.14:** U.S. EPA will provide a copy of the public hearing transcript to Mr. Tschang.

# 14. Redevelopment of Romic Property

Comment 14.1. Concrete Site Cover Impacts on Redevelopment

What issues for redevelopment on that site and the surrounding properties will occur due to the proposed concrete cap over ground contamination after the buildings are torn down? (S.

Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comment 14.1:** The final remedy includes keeping the site covered to block direct exposure to contaminated soils beneath the facility. However, sections of the concrete cover will be temporally removed and replaced during the site investigation and cleanup. A future redeveloper may or may not need to keep the site covered depending on the findings of a Risk Management Plan (RMP) analysis. The cover along with the rest of the property will be evaluated in a RMP that is prepared by a future developer after Romic completes the site cleanup. The RMP is required in the Covenant to Restrict Use of the Property (Covenant) for any redevelopment of the site. The RMP identifies, at a minimum, the proposed redevelopment project, previous site history, the nature and extent of existing contamination from all media, the potential pathways of receptor exposure and health impacts from existing site contamination, and practical ways to mitigate the impacts for the specific project. The Covenant and the RMP work together to ensure that potential impacts from exposure to contaminated soils, ground water or other media are managed in a manner that is protective of human health and the environment.

Comment 14.2. State Landuse Regulation - Land be Used for Small Businesses

State regulation on cleanup that land be used for working space, that small business be set up. (D. Tschang (Chang), Resident, East Palo Alto, California, U.S. EPA Comment Form, October 10, 2007 Open House, Public Meeting and Public Hearing)

**Response to Comment 14.2:** U.S. EPA and DTSC have no legal authority over direct land use for a specific purpose (e.g. small business). The Covenant to Restrict Use of the Property (Covenant) restricts the use of the property to industrial and commercial purposes only.

# **15. Remedial Technologies**

Comment 15.1. Containment of Contaminated Ground water

Can USEPA do any containment to further prevent the contamination from moving to and through the slough? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comment 15.1:** Romic has, at the direction of U.S. EPA, installed a network of injection wells along the eastern boundary of the former facility to limit the off-site migration of contaminated ground water. The wells are part of the enhanced biological treatment system and are used to inject cheese whey and molasses into the subsurface. The contaminated ground water is treated in the subsurface before it migrates off-site. The network of wells along the eastern boundary will be further expanded as part of the final remedy.

## Comment 15.2. Transformation of Chemicals

In-Situ Treatment: How are the chemicals transformed? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comment 15.2:** Enhanced biological treatment involves the injection of an easily degradable carbohydrate solution (e.g., molasses, cheese whey) into the ground water, which is metabolized by the naturally occurring microbes in the subsurface. The microbes breakdown the solvents, cheese whey, and molasses into carbon dioxide, water and salt similar to the way a septic system treats sewage from a home. Enhanced biological treatment is safe because it relies on non-harmful microbes that occur naturally in soil.

Comment 15.3, Need for Permit and Impacts on People

Does this process need a permit? What are the impacts on people? Why is this treatment being considered if there is a possibility that people can be further contaminated? How do possible

emissions happen? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comment 15.3:** The investigation and cleanup work at the former Romic facility is required under an enforceable U.S. EPA Consent Order. In 1988, Romic entered into a RCRA 3008(h) Administrative Order on Consent (Consent Order) with U.S. EPA that required Romic to perform a RCRA Facility Investigation, develop a Corrective Measures Study to evaluate remedial options, and implement a remedy selected by U.S. EPA to correct past releases to the environment from the facility.

People are not being further contaminated by using enhanced biological treatment. There are no volatile organic compound emissions from this process since all the biological treatment occurs underground. No contaminated ground water is being brought to the surface.

Comment 15.4. Capping Should Be Part of Closure Plan

Capping the ground should be an option that is added to the Romic closure plan with DTSC. Will USEPA take the opportunity to add it? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comment 15.4:** DTSC is the lead agency overseeing the closure of the former Romic facility. U.S. EPA does not have authority to make additions to the closure plan. The community will have an opportunity to comment on a draft closure plan for the facility when DTSC begins the public review process. This will be the community's chance to provide direct comments to DTSC on the closure plan. *Comment 15.5. In the discussion of Technologies Screened Out the different clean-up methods that were considered by USEPA and ruled out and why they were ruled out were reported.* 

The summary of this section is:

- Used "public acceptance perspective" as a deterrent to approving the following 2 methods like on-site landfill", "incineration".
- Vertical Barriers Screened out because doesn't fully prevent migration of chemicals (They may seep through the barriers and ground water contamination too deep)
- Liners only for landfill technologies
- Methods that would require further pump and treat screened out Soil flushing, solidification, soil vapor extraction, and fracturing, thermal desorption,
- 'Straight out' taken out because of incompatibility with chemicals biopiling (aerobic and chemicals are anaerobic); neutralization, acid extraction. soil washing, electro-osmosis extraction
- Vapor extraction taken out because of land underneath Romic

We want to know why did USEPA screen out vegetative cover when that could be a "green alternative". There is a "green" method that has been known to reduce urban energy demand and atmospheric pollution. It would not only be remedy but also for preventive in the future. We feel this alternative should also be added to the Romic closure plan and as another part of the remedy plan.

Bio-berms can be used on the sloughs to prevent further contamination? This is more prevention. (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comment 15.5:** A vegetative cover may be appropriate for the site in the future depending on the land use. However, since the possible future land use is uncertain at this time, U.S. EPA is assuming that the existing site cover will remain in place until a redevelopment occurs. That is why the vegetative cover was screened out from further consideration as a remedial technology.

Remediation of the contaminated sediments in the slough is not part of this remedy decision. This decision addresses soil and ground water contamination at the former facility. U.S. EPA will take separate action in the future to address the contaminated sediments in the eastern slough.

## 16. Remedy Contingencies

## Comment 16.1. Proposed Excavation of 3072 Cubic Yards of Contaminated Soil

Page 8. Soil Excavation. Please explain how this figure was reached and identify the proposed sites for excavation. (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

**Response to Comment 16.1:** The 3072 yards of contaminated soil excavation was an approximation used for cost estimating purposes. It assumed that those parts of the former ponds where a thin layer of oil is present on the shallow ground water would be excavated. The exact amount of soil excavation will be determined after Romic completes a site wide investigation of subsurface contamination. This information will be used by Romic to develop a plan for implementing the final remedy selected by U.S. EPA. This plan, called a Corrective Measures Implementation Plan or CMIP, will describe the approach and details of how the facility will be cleaned up including how much soil will be excavated.

## Comment 16.2. Community Involvement for Contingency Changes

Under the Remedy Contingencies section of the SB there is no mention of the City or community's right to know about these contingency changes when they occur. There should be some provision for weigh in on their behalf. In addition, significant changes that require modification of the Remedy Decision should require a new public hearing. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

**Response to Comment 16.2:** U.S. EPA may require or Romic may petition the Agency for a contingency change to the final remedy. Possible remedy contingencies are described in Section 5.2, Remedy Contingencies, of this Final Remedy Decision. The contingency changes may become necessary as work proceeds at the former facility and more is learned about the nature and extent of contamination.

Romic may petition U.S. EPA when it believes that contingency changes are needed for the remedy. Alternatively, U.S. EPA may send a letter to Romic requesting that contingency changes be made to the final remedy. The petition and/or U.S. EPA letter would include a rationale, data and other information that support the given action.

U.S. EPA will gather and consider input from the community before making a final decision on any significant contingency changes. A significant contingency change goes substantively beyond what was envisioned in the September 2007 Statement of Basis.

U.S. EPA will ensure that the community is informed about any significant contingency changes to the final remedy. See the U.S. EPA Response to Comments 11.16 and 11.17 for details on how U.S. EPA will involve the community for significant contingency changes.

## Comment 16.3. Procedures to Amend Plan

What is the procedure if USEPA has to amend the plan as work proceeds? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comment 16.3:** Once U.S. EPA selects the remedy, Romic will be required to investigate the nature and extent of subsurface soil and ground water contamination and to prepare a Corrective Measures Implementation Plan (CMIP) to implement the final remedy. The site wide investigation will take place after all permitted hazardous waste management units have been removed during the closure process.

Making changes to the final remedy is different from making revisions to the CMIP. The CMIP is a plan that could be adjusted by U.S. EPA by sending a letter to Romic requiring the changes. Making a major change to the final remedy could involve having a new public hearing and comment period.

U.S. EPA will conduct a new public hearing and comment period only if major changes are needed for the remedy decision. Major changes to the final remedy would include the introduction and use of a completely new remedial technology beyond what was included in the remedy decision.

## Comment 16.4. Pump and Treat Contingency

According to the USEPA plan, if Romic (or USEPA) decided to pump and treat at some point for whatever reason, they couldn't. The only method for the undiscovered site is 1) cheese whey, 2) excavations 3) off-drilling, and 4) monitored natural attenuation. Is there some reason why there is no contingency allowed for pump and treat in this plan? (No one really knows what is under the buildings, or how what is there should be handled.) (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

**Response to Comment 16.4:** U.S. EPA proposed using enhanced biological treatment over pump and treatment because it works better at reducing volatile organic compound concentrations. Existing data to date has shown that enhanced biological treatment is superior to pump and treatment. Romic used pump and treatment from about 1994 to 2003 with limited success. The cheese whey/molasses pilot studies and its use at heavily contaminated parts of the facility has shown consistent reductions in volatile organic compound concentrations. Using pump and treatment of contaminated ground water would be possible at Romic if U.S. EPA amended the final remedy. This is an unlikely scenario since at present there is no good reason to change remedial technologies.

## 17. Slough Investigation and Remediation

The following eight comments raise similar concerns and are addressed in a single U.S. EPA response:

Comment 17.1. Responsibility and Timing for Slough Cleanup

Despite the exclusion of the slough's cleanup from the proposed remedy, it should have been included since its contamination occurred due to activity conducted on the Romic site. According to the SB, recent sediment sampling shows that the sloughs are contaminated. Additional studies must be conducted particularly in light of the fact that the U.S. EPA does not accept the findings of the previous studies done on the slough (page 24). When will the slough cleanup be addressed if it is not part of this remedy? (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

## Comment 17.2. Responsibility for Slough Sediment Cleanup

In terms of the slough near Romic which the report says is contaminated, who will be made responsible to clean up the contaminated sediments in the slough? It says it will be "covered in a later action" but it doesn't specify when and whose responsibility that falls on? Will Romic be responsible for the cleanup? If so, this must be clearly stated in the report. (C. Domingo, Youth United for Community Action, November 1, 2007 email)

Comment 17.3. Responsibility for Slough Sediment Cleanup

We are concerned with the remediation of the slough near Romic. Who will be made responsible to clean up the contaminated sediments in the slough? Your document says it will be "covered in a later action" but it doesn't specify when and whose responsibility it is. We would like to make this a part of the remedy plan or a concrete proposal of when and how this phase will be addressed? (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

Comment 17.4. Responsibility for Slough Sediment Cleanup

Another concern that we have is about that slough near Romic. I want to know who will be made responsible to clean up the contaminated sediments in the slough? It says that it will be covered in a later action but it doesn't specify when and whose responsibility it will be. (A. Alvarez, Youth United for Community Action, October 24, 2007 letter)

Comment 17.5. Responsibility for Slough Sediment Cleanup

Now, is one other thing is that in terms of Romic, who will be made responsible to cleanup the contaminated sediments in the slough? It says that it will be covered in a later action, but it doesn't specify when and who is responsible for it. Don't you think that we actually need to know that has least information. (A. Alvarez, Youth United for Community Action, October 10, 2007 Public Hearing Testimony)

We'll send it and the final thing was slough contamination. That was very important. In this document, it says we'll take care of it sometime, someplace. Well, you know, the health of the bay lies in the health of the slough. Don't keep just ignoring it. I'm saying to you tonight: You are not talking to a community of dopes. I'm saying to you tonight, we did not come here for you to play us cheap. I'm saying to you tonight, if you have one ounce of integrity in your own personal self, and I'm not talking about the Agency, but I'm talking about your personal self, you have to do a better job than you have done so far. (K. Evans, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

## Comment 17.7. Specify Specific Time for Slough Remediation

The proposed remedy states that the remediation of the slough will be addressed at a later date and not in the present document. The slough should be addressed in the Statement of Basis (SB) or at a minimum, reference to a specific date and the document in which this issue will be addressed should be included in this SB. (C. Romero, Vice-Chair, East Palo Alto Planning Commission (individual comment, not from Planning Commission), October 29, 2007 email)

Comment 17.8. Timing for Slough Remediation

The strategy to incorporate the remediation of the sloughs at a later date is consistent with the goal of beginning the remediation of the site as soon as possible. At what specific point or milestone in this remedy plan process would the analysis of the sloughs begin, and what are the steps and the plan for remediating the sloughs? Please add a description of the slough remedy process and include specific milestones. (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

**Response to Comments 17.1, 17.2, 17.3, 17.4, 17.5, 17.6, 17.7, and 17.8:** Romic, with U.S EPA oversight, will investigate the sediment contamination in the eastern slough. Romic, at the request of U.S. EPA, submitted a draft work plan for the slough investigation on February 29, 2008. The purpose of the workplan is to gather additional data on the extent of volatile organic compound contamination and its possible impacts on organisms that live in the sediment. U.S. EPA has requested that the U.S. Fish and Wildlife Service and California Department of Fish and Game review the workplan. The investigation will take place in the summer of 2008 after U.S. EPA approves the workplan.

U.S. EPA will consider the data collected from the investigation, along with existing information, and develop a proposed remedy to address the contaminated sediments. U.S. EPA will request public comment on the proposed plan and will have a public meeting and hearing sometime in the Spring of 2009.

## 18. Timing of Site Cleanup and Plan Approvals

The following three comments raise similar concerns and are addressed in a single U.S. EPA response:

### Comment 18.1. Timing for Cleanup Plan Approval

You do not list a timeline for approval of the clean-up plan after you have received all the comments. Our community has seen a bogus EIR and permit process implemented by the Department of Toxic Substances Control that took 15 years, and we are tired of the lack of timelines. When will you approve the plan? (C. Domingo, Youth United for Community Action, November 1, 2007 email)

Comment 18.2. Timing for Cleanup Plan Approval

Based on our previous experiences it is paramount for us to know now what is the USEPA timeline for approval after receiving comments, and approximately when can we expect the agency to approve the plan. A proposed timeline should have accompanied the Proposed Remediation Plan so the public could be informed and could therefore hold the Agency responsible. (S. Webster, K. A. Evans, Youth United for Community Action, Ujima Security Council of East Palo Alto, and the Environmental Justice Group of East Palo, October 31, 2007 letter)

Comment 18.3. Timing of Project

What are the timelines of this project? What are the timelines? Do we have to always sit and wait for somebody to say, okay, well, at the end of this, then somebody have to do something? Then we'll respond. Then at the end of this, somebody else. We're just constantly waiting for timelines. These aren't benchmarks that you must know. This isn't my field. If it were my field, I would know what the benchmarks are, timelines, things slip all the time, but we have some idea, the community would have some ideas of whether we're talking about five years, ten years, 25 years or what? We don't even know what the benchmarks are. If you don't know what they are, somebody needs to go back in your office, sit down and get those together so that you can make a logical presentation to this community. I call it disrespect. Oh, those people don't know. We just come here with any old thing and pretty posters and all this nice stuff and we're supposed to say, isn't that nice? All these people came to see us. This is our lives. You don't understand that people in our age group, we are burying our friends and our families from contamination over and over, and you come here and show us pretty pictures and won't tell us what is the result of the molasses and whey that you have had in the ground for this while now. This is an insult. (K. Evans, Resident, East Palo Alto, California, October 10, 2007 Public Hearing Testimony)

**Response to Comments 18.1, 18.2 and 18.3:** U.S. EPA will complete its response to comments and select the cleanup plan in the summer of 2008.

The timeline for the site cleanup is very dynamic. U.S. EPA will keep the residents of East Palo Alto advised about the next steps for the site cleanup during informal consultations with the community.

Comment 18.4. Timeframe to Complete Remediation

(Page 28. 10.2: page 39: page 40. 5th Bullet) Is it possible to shorten the timeframe? How can the timeframe be expedited? Is it through increasing the number of wells or the soil excavated? Why does the plan have a 7 year remediation goal (page 28) and monitoring reports for only 5 years (pages 1, 4, 8, 34, and 35)? Also, what is the 15 year system maintenance and operation mentioned on page 39? (A. James, City Manager, City of East Palo Alto, October 26, 2007 letter)

**Response to Comment 18.4:** U.S. EPA is committed to making the cleanup happen as safely and as quickly as is practically possible. One thing that has been done to expedite the process is to consolidate the soil and ground water sampling for the facility closure and site cleanup into a single workplan. U.S. EPA, in consultation with DTSC and the RWQCB, has directed Romic to prepare a single site wide subsurface investigation workplan.

Romic will prepare a Remedy Performance Evaluation Report <u>every</u> five years that will evaluate the long-term effectiveness and reliability of the final remedy. The report will examine such questions as: Are the media cleanup objectives and remedy performance standards being achieved? How well are things working? Are contaminant concentrations levels trending downward? What improvements are necessary and how will they be implemented?

The final remedy must be operated and maintained. For example, cheese whey and molasses injections must be done on a periodic basis to ensure that the enhanced biological treatment system remains effective. In addition, ground water monitoring must continue into the future in order to assess the effectiveness of the treatment system. The cost estimate given on page 39 of the September 2007 Statement of Basis assumes 15 years of operation and maintenance of the final remedy.