MURRAY SMELTER SITE:

An Example of Proactive, Creative Problem Solving at a Superfund Site

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Collaborative problem-solving meetings on the Murray Smelter Site, conducted over a seven-month period, resulted in: (1) a remediation plan which has the support of the U.S. Environmental Protection Agency (EPA), the Utah Department of Environmental Quality (UDEQ), the primary potentially responsible party (Asarco), the City of Murray, and all the current property owners; (2) a plan for redevelopment of the site which will benefit the City, the community, and the property owners; and (3) a commitment to integrate implementation of remedial actions into redevelopment activities.

BACKGROUND

The Murray Smelter Site is a 141-acre parcel, located in Murray, Utah, south of Salt Lake City. Formerly owned by Asarco, the site included two smelters: the Germania Smelter and Refinery Works, which operated from 1872 to 1902, and the Murray Smelter, which operated from 1902 to 1949. At the time of its construction, the Murray Smelter, which processed lead and silver ores, was reported to be the largest primary lead smelter in the world. After 1949, the property was sold by Asarco and the smelter was demolished.

Currently, the site is a mix of primarily industrial uses. Located across the street from Murray City Hall, the site can be easily identified by two landmark smokestacks. Site boundaries were determined using air dispersion models to estimate the extent of environmental impact due to smelter operations. Bounded by Little Cottonwood Creek on the north, the portion of the site requiring remediation includes: manufacture of architectural pre-cast concrete and stone products, a concrete pipe distribution yard, an asphalt plant (inactive), a cement storage and distribution terminal, a communications business, a concrete sales business, wholesaling operations, two mobile home parks, and 12 residential properties in areas surrounding the old smelter.

In 1994, the EPA proposed that the former Murray Smelter Site be included on the National Priorities List of Superfund sites, and concluded that remedial actions should be taken at the Site pursuant to the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). Environmental sampling began on the site in October 1995. Asarco initiated the Engineering Evaluation/Cost Analysis (EE/CA) for the Site in 1995 and prepared a Site Characterization Report in 1996. (An EE/CA is a report that evaluates alternatives for cleanup of a contaminated site. An EE/CA could target specific risk-based cleanup levels or could identify residual health risk associated with alternatives.) The Site Characterization report showed areas of elevated arsenic and lead concentrations in soil, correlating with the locations of former smelter operations or areas where smelter products and byproducts were historically stored or placed. Data also showed contamination of the ground water at levels 500 times the current drinking water standards for arsenic. (This article does not seek to address the on-going scientific and

policy debate related to arsenic toxicity or the MCL for arsenic.) EPA prepared a draft Baseline Risk Assessment for human health. The risk-driving exposure pathways for the contamination are ingestion of soils and drinking ground water. In addition, off-site soils are contaminated with lead, probably due to deposition of air emissions from the smelter during its period of operation.

The Decision to Use a Collaborative Problem-Solving Process

The EPA Region 8 Remedial Project Manager, Bonita Lavelle[1], recommended a collaborative problem-solving process on the Murray Smelter Site project in order to expedite decision making on technical remediation issues and to address the City's hopes for redevelopment of the site.

The results of the baseline risk assessment showed that cleanup requirements for soil in areas where the former smelter operated significantly depended on whether people working on the site would be outdoors much of the time, engaged in heavy industrial activities, or whether they would be indoors much of the time in an office, retail, or light industrial setting. The risks associated with these two scenarios are very different.

The City of Murray expressed an interest in redeveloping the site to commercial uses and adopted a general plan amendment that identified preferred future commercial land use for the Murray Smelter Site. The Utah Transit Authority purchased a segment of the site for development of a light rail station. The City of Murray identified the site's redevelopment potential due to its location and features, including: access to the I-15 freeway, proximity to State Street (a major north-south arterial), identity and visibility from the landmark stacks, hilltop location in the central valley, future light rail access, and existing utility infrastructure.

Ms. Lavelle recommended that a series of collaborative problem-solving meetings among the regulatory agencies, Asarco, the City, and the property owners be conducted to discuss the goals of the remediation and to obtain input from the property owners and Murray City officials about likely future land use in the former operational areas of the site. The problem-solving process would be structured around the framework of an EE/CA. The final result would be a draft EE/CA or Feasibility Study document which would be put out for public comment. CDR Associates[2], of Boulder, Colorado, was hired to bring together all the stakeholders and to facilitate the meetings. The Murray Smelter Working Group was formed in October 1996, to inform EPA about pending site development plans and to provide a forum for discussing alternative cleanup strategies for the former smelter operation areas of the site. The Working Group consisted of representatives of Asarco (the former smelter operator), owners of property and businesses on the site, UDEQ, Murray City, and EPA. In addition, attorneys representing many of the parties participated in the Working Group.

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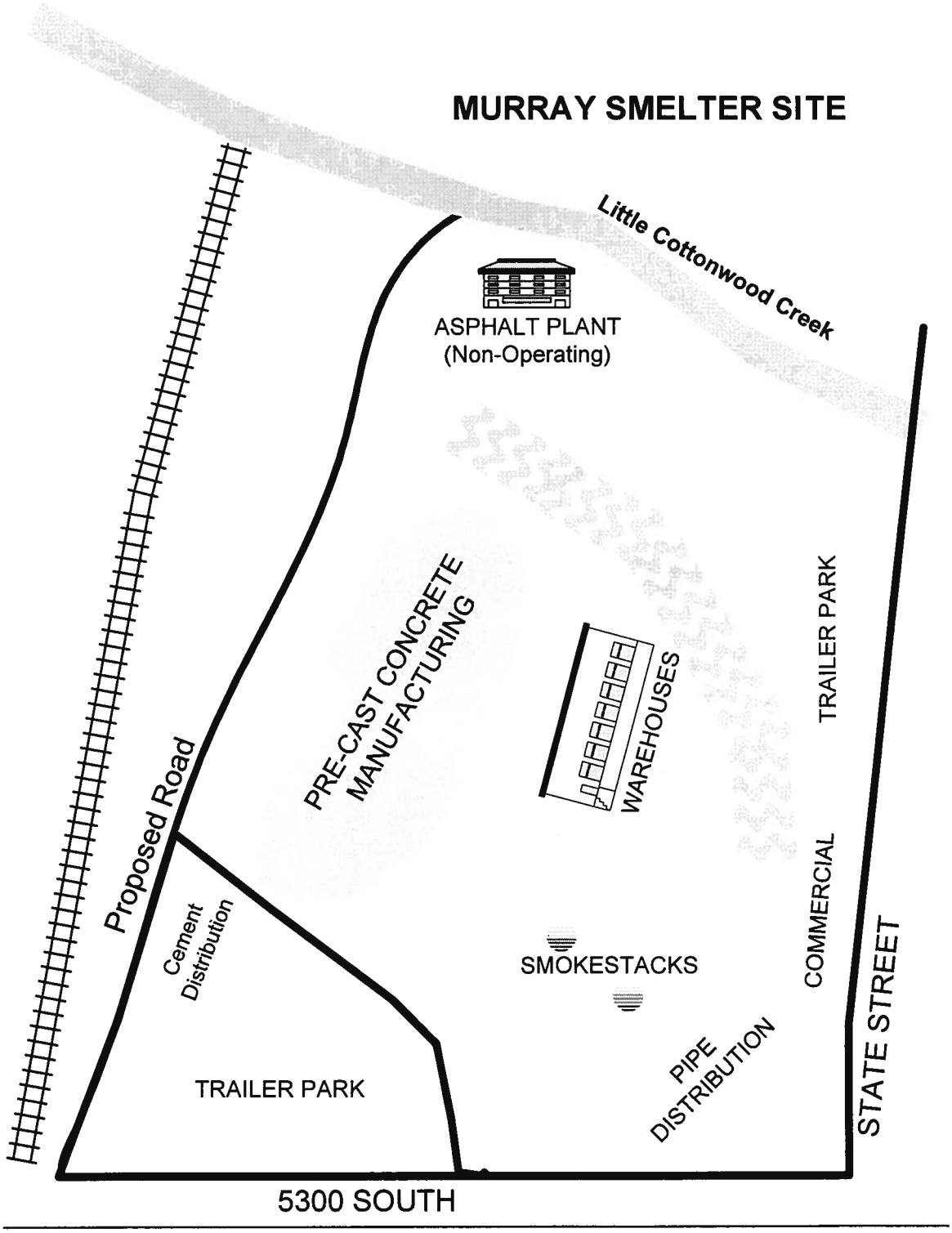

MURRAY SMELTER SITE
Little Cottonwood Creek
ASPHALT PLANT
(Non-Operating)
PRE-CAST CONCRETE
MANUFACTURING
WAREHOUSES
TRAILER PARK
Proposed Road
Cement
Distribution
SMOKESTACKS
COMMERCIAL
STATE STREET
TRAILER PARK
PIPE
DISTRIBUTION
5300 SOUTH

The Results of the Collaborative Problem-Solving Process

In a series of open meetings conducted from October 1996 to April 1997, implications of alternative cleanup strategies were discussed by the Working Group. These discussions helped EPA to evaluate the effectiveness and implementability of various alternative cleanup strategies. From these facilitated discussions emerged a common goal of the Working Group: To integrate future site development plans with site cleanup to the maximum extent possible. This would avoid a problem sometimes seen at contaminated sites: the site is cleaned up to present an acceptable health risk under a specific land use, only to discover later that the remedy was either excessive or inadequate for some alternative land use ultimately implemented.

The discussions resulted in a number of agreements which helped inform EPA decision making on the preferred alternative for remediation. There were two categories of issues for discussion and subsequent agreements: the technical remediation issues and the land use issues.

1. Early in the process, EPA and UDEQ identified the regulatory cleanup requirements which were considered protective of human health. A preliminary assumption was made of a future commercial and light industrial land use, rather than the existing industrial land use. EPA, UDEQ, and Asarco's technical consultants then met, explored the technical challenges of addressing the contamination, discussed principles of sound science, identified information gaps for which additional data was required, and looked for effective ways to provide the required level of protectiveness. Through this process, EPA was able to make its choice of a preferred alternative for the remediation, with the concurrence of UDEQ; and Asarco's technical consultants were able to draft a Feasibility Report that was acceptable to EPA and to UDEQ, with only minor revisions.
2. Through the problem-solving process, the Working Group developed a new vision for the site use and came to agreements to implement that vision. The site will become a commercial site to be used primarily for movie theaters, restaurants, and retail activities. A north-south road through the site will provide needed access to interior portions of the site, will serve as a repository for contaminated soils, and as a means of alleviating Murray's traffic congestion. These agreements are documented in an *Agreement-in-Principle* (AIP), signed in May 1997, which sets forth the presumption that the site will become commercial and light industrial, thus eliminating heavy outdoor work on the site. In this agreement, the parties affirm the preferred alternative, state their agreements related to dedication of land for and construction of the road, clarify land use plans, and agree to establish and abide by institutional controls restricting residential and industrial land uses and use of ground water. The greater certainty of the future land use, provided by the AIP, enabled EPA to make its choice of a preferred alternative for the remediation, based on the anticipated future land use of the site.

The plan which emerged from the discussions is a classic "win-win" solution, enabling all the parties to benefit in return for their contribution to each other and to the entire solution.

The contributions to the solution included:

1. Asarco will assume the responsibility for cleanup of the site and will build the base of the road as part of the clean up effort.
2. The property owners will dedicate land for the road, without seeking compensation from the City or from Asarco. The property owners will pay for curbs, gutters, and sidewalks through a special improvement district.
3. The City will design the road, place asphalt on the road, and construct a utility and storm drain system for the site and will not seek payment from the property owners other than for curbs, gutters, and sidewalks.
4. The City and property owners will provide public and private institutional controls to ensure future protectiveness at the site; Asarco will provide the City with funding to administer these controls.
5. Several parties will contribute funds directly or indirectly to facilitate the early termination of a lease on the site, enabling the road construction to proceed as needed for the opening of the light rail station as well as for timely remediation.

The benefits from this agreement include:

1. Asarco will have an on-site repository for contaminated soils and will receive the cooperation of the property owners during Asarco's work to clean up the site. Asarco will be recognized for its contribution to community goals.
2. The City will be able to receive higher taxes from the land. The site will become an asset to the Murray community. The City will have another route for north-south traffic flow.
3. The property owners will be removed from the threat of potential liability and will be able to sell their land, at increased value, to a developer.
4. The developer, who emerged during the period of discussions, will have a developable piece of property that has been cleaned up to a level protective of commercial uses with a desirable location, including road and utility infrastructure, and will be able to receive the protection from liability available in a Prospective Purchaser's Agreement. (A PPA is a document provided by EPA that provides protection to a new owner, who participates in the remediation, from certain forms of liability for the contamination.)
5. Through a negotiated land swap, the Utah Transit Authority will have a more favorable location for their light rail station and parking lot. The road will provide UTA with access to the station.

EPA announced its preferred alternative for the Murray Smelter Site in a Proposed Plan released on September 22, 1997. After a 30-day public comment period, work began concurrently on the Record of Decision (ROD) and the Remedial Design. EPA issued the Murray Smelter ROD on April 1,1998. Citing concerns about the long time frame necessary for ground water restoration, UDEQ ultimately chose not to concur on the ROD. The cleanup plan calls for excavation of approximately 68,000 cubic yards of contaminated soil which is acting as the source of ground water contamination and consolidation of this material in an on-site repository which will be constructed as a road through the site. The road is expected to act as a catalyst for site development by providing access to the interior portions of the site. Ground water quality will be restored through natural attenuation.

On June 8, 1998, the Department of Justice, on behalf of EPA, lodged a consent decree in U.S. District Court in Salt Lake City which settles the government's claims against Asarco and other parties for the Murray Smelter Site. Under the terms of the decree, Asarco will implement the cleanup plan developed in the collaborative process and described in the ROD. The other parties, the property owners and Murray City, agree to provide access for the remediation and to comply with restrictions on land use and ground water use. The consent decree is the culmination of the collaborative process EPA initiated at the site. The agreements described in the AIP are now part of the consent decree, a legally enforceable document.

EPA has entered into negotiations of a prospective purchaser agreement with a major developer in the Salt Lake area who is interested in acquiring all the property on the site for the development of a commercial/retail complex anchored around a major cinema and high-end restaurants. The plans for the northern end of the site include construction of a one million square foot hospital administration complex. Construction of the remediation began in August 1998. Site development activities are expected to begin in spring 1999.

How the Collaborative Problem-Solving Process Helped Bring About the Agreements

A traditional Superfund process might have involved technical document preparation by Asarco, review by EPA and UDEQ, extensive revisions, and additional reviews and revisions. Primarily a process of report and comment exchanges and piecemeal focus on individual issues, the process might have taken two or more years to complete. It would have been exceedingly difficult to weave the community's land use issues into the technical process. Certainly the time required for the traditional process would not have allowed the City to capitalize on this development opportunity.

Through Working Group meetings, the parties were able to address all the issues, keeping in mind the full range of interests, and to link the remediation issues with the land use issues. The issues that needed to be addressed as an entire package included:

- What was the necessary level of protectiveness for the site?
- What methods for remediation were appropriate, would fit EPA's evaluation criteria, and would be acceptable to UDEQ?

- Would there be a road, and would there be redevelopment?
- Who would pay for what, both in terms of remediation and in terms of the changed land use?

The primary interests that were voiced by the various parties included:

- To protect human health
- To meet the requirements of CERCLA and the National Contingency Plan
- To meet EPA's criteria of effectiveness, implementability, and cost
- To limit liability
- To minimize cleanup cost
- To enhance the value and beneficial use of the land
- To meet the goals of EPA's Brownfields program: to remove obstacles that Superfund has put on contaminated properties and to prevent barriers to redevelopment and investment in the property by removing the stigma of potential liability.
- To ensure consistent application of regulatory requirements
- To provide access to and facilities for the light rail station
- To provide north-south traffic flow
- To minimize disruption to ongoing operations
- To reach closure

Although not all parties embraced all interests, all the parties agreed to explore ways to address all the interests.

By discussing all the issues in the Working Group meetings and by setting the goal of meeting the collective list of interests, the parties were able to avoid a lose-lose outcome. Without the willingness of the parties to persist in searching for a mutually beneficial and technically acceptable solution, it would have been easy for the process to fall apart. If any of the parties had become "greedy"—if the property owners had demanded payment from Asarco or from the City for the road right-of-way property, if Asarco had demanded that the property owners pay a share of the remediation, if the City had made the property owners pay the for the cost of the road surface and the utility construction, if either regulatory agency had insisted on the most aggressive remediation method regardless of effectiveness or had refused to consider a reasonable future land use scenario—then the deal would have come tumbling down like a house of cards. A key role of the facilitators was to keep the parties talking and to keep their sights on the potential gains they could achieve if they were willing to take risks and make their contribution to the total effort.

The facilitators' job extended beyond meeting management. The facilitators employed numerous strategies to keep the parties moving forward, including:

- Confidential pre-meeting and between-meeting telephone interviews with the parties to build trust, explore concerns, serve as a sounding board for parties' ideas, help the parties think about how and when to make proposals, and coach the parties on how to effectively raise their concerns or offer their suggestions to the Working Group
- Clarification of the purpose of the Working Group, the roles of the parties, and behavioral guidelines to promote productive meetings, through preparation and subsequent discussion of draft Procedural Guidelines for the Working Group
- Design of agendas for each meeting, to determine the sequence of issues for discussion and to set specific tasks for each meeting
- During meetings: asking key questions to stimulate discussion; restating parties' comments to emphasize critical points the group needed to hear and understand; asking questions for clarification when it seemed that one or more parties did not understand another party's comments; respectfully asking hard questions which the parties could not ask that challenged assumptions or wishful thinking; calling breaks to allow for informal discussions to occur; organizing subgroup meetings where small groups could work effectively on particular tasks; summarizing progress and agreements made and identifying unresolved questions; eliciting the agenda for the next meeting and next steps to be achieved before the next meeting
- Documentation of progress through meeting summaries which helped the Working Group build on the accomplishments of earlier meetings, provided catch-up for any absent group members, reminded group members of any between-meeting tasks, maintained an open process and avoided any appearance of secrecy, provided useful information for the Feasibility Study which reflected the analysis of the group, and became part of the official record.

Benefits of Using an Outside, Neutral Facilitator

As discussed above, the collaborative problem-solving process was an efficient approach for addressing the full range of issues, for working out the technical challenges of the project, and for obtaining information about land use upon which to build the proposed remediation plan. To some, EPA would have been the obvious party to run the meetings; what was the benefit of having an outside, neutral facilitator to run the meetings?

Whenever a party with a vested interest and with decision-making authority runs a meeting, there is a natural tendency for other participants to assume that the meeting process will be manipulated to achieve the leader's desired outcome. Or, if the party running the meeting tries to overcome that assumption, the danger is that the party will lose its ability to advocate for its interests, raise its concerns, and express its views. The party who leads the meeting will be busy trying to draw out other groups' and individuals' interests, questions, and concerns and may look more like an advocate for others' perspectives than for its own. The primary benefit of having a facilitator was that EPA could maintain an appropriate role in the process. EPA was able to remain an advocate for its own interests and listen to the interests and concerns of others. EPA created a forum in which the relevant land use issues could be discussed; however, EPA

was able to maintain its role as an information-provider on remediation needs, without directing or appearing to direct the land use discussions which are outside EPA's purview. EPA's role as decision-maker on the remediation remained clear. Had EPA facilitated the meetings, there would have been great potential for confusion about EPA's role and for suspicion about EPA's intentions.

During the course of the meetings, the facilitator could (and did) ask hard questions, "dumb" questions of clarification, and questions that the facilitator knew the parties had but couldn't risk asking. This kept the parties from appearing antagonistic or ill-informed. At the end of meetings, the facilitator could generate a "to do" list for the Working Group. This avoided the appearance of EPA directing the parties and prevented potential resistance.

The Role of Technical Consultants During the Collaborative Problem-Solving Process

The availability of technical expertise to provide specific information to the Working Group was also critical to the success of this process. The particular questions addressed by technical experts at the Murray Smelter site were:

1. What is the interaction between ground water and surface water at the site?
2. Is it technically practical to treat ground water at the site with available technologies?
3. What is the predicted time frame for achieving ground water clean up goals using natural attenuation as the remedial action?
4. Given the preferred road alignment, amount of contaminated soil, and the depth of ground water from the surface at the site, is it feasible to build an on-site repository beneath the proposed roadway? In other words, would all the contaminated materials fit underneath the road without coming in contact with ground water?
5. What are the uncertainties in the estimates of risk to off-facility residents due to exposure to lead in soils?

Typically, the Working Group discussions would come to a point where more information was needed in order to continue. The group then worked with the facilitators to formulate specific questions and to identify the necessary expertise (e.g., toxicologist, hydrogeologist, civil engineer, ground water modeler) to address the questions. If specific enough, a task group was formed which met separately from the Working Group and reported its findings. Ultimately, two task groups were formed at Murray, the ground water/surface water task group and the residential soils task group. Technical representatives of EPA, UDEQ, Asarco, and Murray City comprised the task groups.

The ground water/surface water task group was formed very early in the process. This group addressed specific questions which allowed EPA and UDEQ to determine whether certain environmental regulations were applicable to the Murray Smelter site. Once the clean up requirements were identified, the task group was asked to compare treatment of ground water with natural attenuation of ground water. Where information was lacking,

the task group prepared work plans for collection of information. Asarco then implemented these work plans.

As the various clean up alternatives began to develop, Asarco's technical representatives did the work of refining the alternatives by calculating volumes of contaminated material and comparing these to repository capacity. EPA, UDEQ, and Murray City technical representatives reviewed the work of Asarco. It was helpful for the technical representatives of all four parties to attend the larger Working Group meetings to become familiar with the problems and to understand the larger perspective of the project.

The last working group to be formed addressed the uncertainties in EPA's estimates of risk to the off-facility residents from exposure to lead-contaminated soil. This task group was formed late in the process when it became clear that the Record of Decision for the site would address both on-facility and off-facility issues and that both areas needed to be resolved simultaneously.

The Role of Attorneys During the Collaborative Problem-Solving Process

The participation of the parties' attorneys was critical to the success of this process. As part of the Working Group, these attorneys had multiple roles:

1. They advised their clients about what could and could not be done under the law;
2. They listened to their clients' (and the other parties') expressions of interests and looked for ways to meet those collective interests;
3. They reviewed the Agreement-in-Principle (drafted by one of the attorneys) and other key documents to ensure that these were accurate and legally sound statements of their clients' commitments;
4. The participation of EPA and UDEQ attorneys gave the Working Group confidence that agreements reached in discussions had the support of the legal enforcement programs of both agencies.

Some attorneys participated actively at every meeting; others attended at strategic intervals and/or advised their clients outside of the meetings.

In recent interviews, the attorneys mentioned key factors which contributed to the success of this project:

1. The attorneys took a problem-solving approach rather than a traditional legally-focused approach. Although they noted defenses and stated legal positions for the record, they quickly turned to problem solving as the primary approach for the meetings.
2. They provided legal guidance when there was confusion about what was and was not possible under the law. This brought clarity and reality to development of solutions.
3. They often let their clients take the lead role in articulating their interests and concerns; the attorneys then looked for strategies that would enable the clients to do

what they saw to be in their own best interest which would have the support of the rest of the group. They knew when to represent their clients' interests so that the negotiations didn't go too far before clarifications were made and positions were affirmed.

4. The attorneys often generated options and offered alternative solutions that could address their clients' and other parties' needs and concerns.
5. Although the attorneys provided information to their clients about their clients' rights, they were able to help their clients weigh the exercise of those rights against the potential benefit the clients might receive if they were flexible about those rights.
6. The attorneys articulated issues in non-legal language so the entire group could participate in discussions of the issues.
7. The Working Group, including the attorneys, established a positive working relationship early in the process and maintained a sense of humor and a predominantly non-adversarial tone throughout. The attorneys articulated their points of view and asked tough questions that were both clear and diplomatic.
8. Asarco's attorney drafted an Agreement-in-Principle. This document defined specific commitments and deadlines for closure and brought focus to discussions. As agreements were crystallized through consideration and approval of this document, the EPA received the level of certainty needed to proceed to a Proposed Plan. This written draft statement of commitments served as a vehicle for some of the parties to solicit advice from their attorneys who had not been present at early meetings.
9. The City Attorney provided a critical link between city departments and property owners. His consistent involvement and communication with parties between the meetings was instrumental in keeping the city and the property owners connected throughout the process. In addition, his expertise in city rules and procedures enabled the group to develop a pragmatic approach to financing the road and establishing institutional controls.
10. The EPA attorney articulated the Superfund requirements and explained how the parties could both resolve their liability issues and address their other interests. In addition, he helped define the boundaries for EPA involvement in land use decisions by the property owners and the city.
11. The State of Utah attorney worked as a team with the primary Utah Department of Environmental Quality representative. The attorney spoke to the legal issues; the UDEQ representative spoke to technical issues; both added their opinions on how these were linked.
12. An attorney for several of the property owners was able to provide a unified voice for a group of property owners who could not attend the meetings.

According to the attorneys, the challenges presented by the collaborative problem-solving process included:

1. The attorneys were in unfamiliar territory. For example, they had to incorporate the concerns of parties who weren't potentially liable. There were more parties and more interests to address than there would have been in a traditional court case.
2. They had to shift their focus from the traditional framework of litigation toward the framework of "creating a deal."
3. They had to address parties' interests which extended beyond strict legal rights.
4. Some of the attorneys represented clients who were not present when productive discussions took place and decisions were made in the meetings. These attorneys were in the critical position of recapturing and communicating the basis for all tentative agreements made and relationships forged during the meetings. This dynamic made it difficult for the parties to develop confidence that absent, but represented, parties would eventually approve agreements developed in the meetings.

Legal participation complemented the participation of the parties and provided the reality of the legal environment in which problem solving occurred. The attorneys contributed legal and practical expertise which helped move the group forward to agreements on the remediation and land use approach to the site. The attorneys joined with their clients in participating in a productive, constructive way.

Chronology of Meetings as part of the Collaborative Problem-Solving Process for the Murray Smelter Site

October 11, 1996:

- Getting acquainted
- Review of procedural guidelines for the process
- Setting of goals for the process
- Parties' statements of their interests and concerns
- Review of the purpose of the Brownfields program
- Identification of EPA and UDEQ cleanup requirements

October 15 and 16, 1996:

- Presentation of information about environmental contamination at the site
- Presentation of city's land use goals
- Exploration of potential remediation alternatives
- Caucus session on ground water issues
- Development of questions for the toxicologists to address
- Development of questions for ground water experts to address

October 25 and 26, 1996:

- Special meeting of technical task group to address ground water issues. (Feasibility of pump and treat technology as a remedial alternative and effectiveness of source control)

November 6 and 7, 1996:

- Report from the technical task group on ground water issues
- Statements of interests related to the road through the site
- Review of alignment options for the road
- OSHA presentation on worker safety issues
- Caucus sessions on additional informational needs—surface water issues, volumes of materials to be removed or consolidated and capped, future development of the site, and road alignment options

December 5, 1996:

- Discussion of road design and alignment alternatives
- Review of options to finance the road
- Discussion of technical issues regarding acceptable levels of lead in soils
- Caucus sessions on soils, future land use, property owners' needs regarding the road, new road alignment options

January 8, 1997:

- Special meeting of technical task group to finalize approaches to be taken in the Feasibility Report

January 23, 1997:

- Review of EPA's process for choosing an environmental remedy for the site
- Discussion of the level of certainty required by EPA in order to support a remedy decision based on future commercial land use
- Proposal of an Agreement-in-Principle (AIP) to provide a higher level of certainty for the Proposed Plan, regarding future land use plans and the use of the road for a repository
- Discussion of the linkage between the proposed remedy and development prospects for the site
- Discussion of liability issues and presentation of the prospective purchaser agreement concept
- Identification of steps needed to move the road forward within needed timeframes

February 24 and 25, 1997:

- Presentation of Feasibility Study findings and remediation alternatives
- Review and comments on the first draft AIP

March 14, 1997:

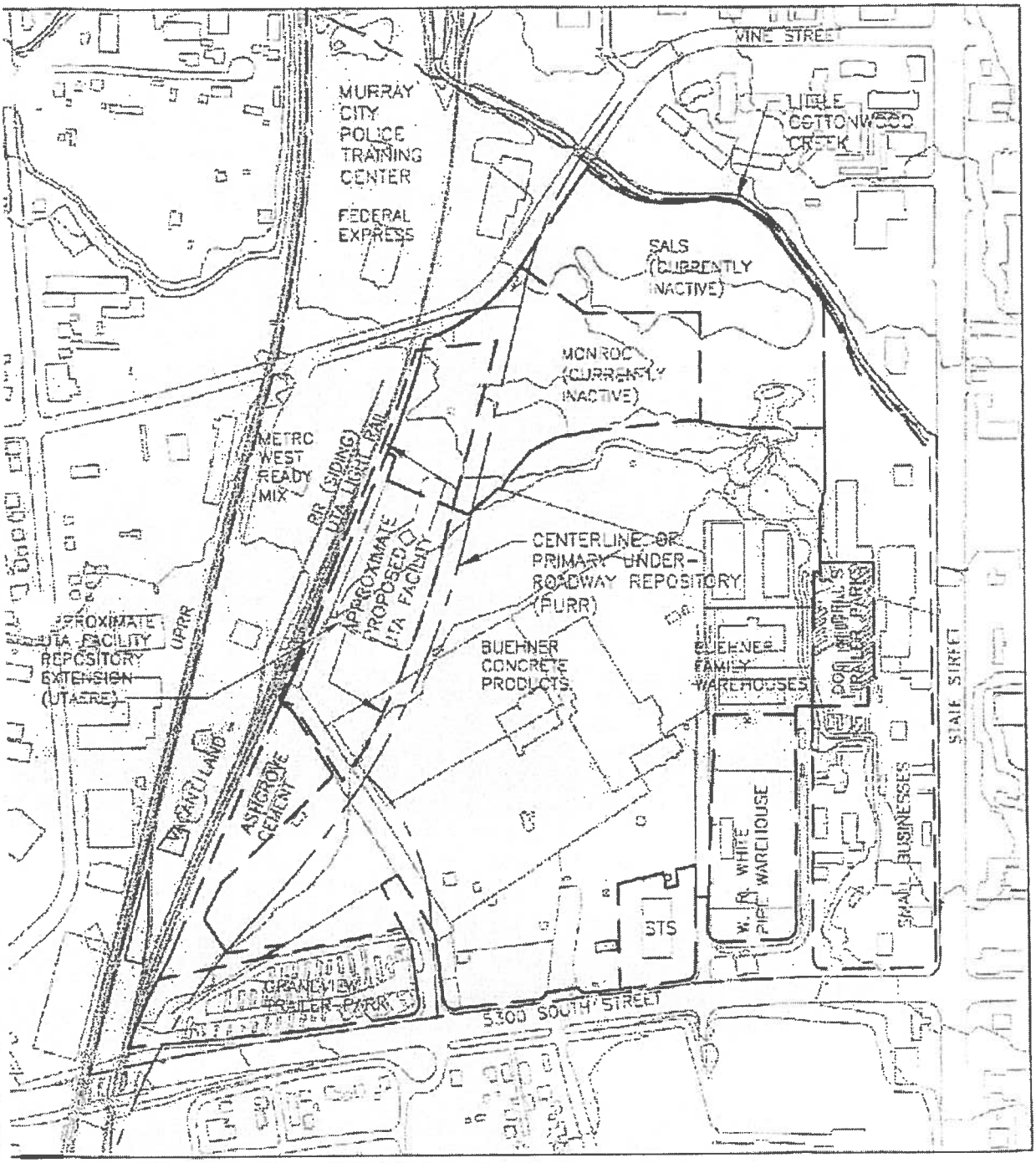
- Report on progress within each represented organization in obtaining ratification of agreements stated in the AIP
- Clarification of the nature of institutional controls needed to maintain protectiveness
- Clarification of timing needs for road completion

April 14, 1997:

- Final meeting to refine the AIP, which became the basis for land use assumptions of the Proposed Plan

March and April 1998

- Follow-up meetings to finalize decisions related to contributions for the road right-of-way


VINE STREET
MURRAY CITY POLICE TRAINING CENTER
FEDERAL EXPRESS
LITTLE COTTONWOOD CREEK
SALS (CURRENTLY INACTIVE)
MONROC (CURRENTLY INACTIVE)
METRO WEST READY MIX
RR (SIDING) UTA LIGHT RAIL
APPROXIMATE PROPOSED UTA FACILITY
CENTERLINE OF PRIMARY UNDER-ROADWAY REPOSITORY (PURR)
APPROXIMATE UTA FACILITY REPOSITORY EXTENSION (UTAERE)
UPRR
BUEHNER CONCRETE PRODUCTS
BUEHNER FAMILY WAREHOUSES
DOD CAPITAL TRAILER PARK
STATE STREET
GRAND AVE.
ASHGROVE CEMENT
W. R. WHITE WAREHOUSE
STS
SMALL BUSINESSES
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5300 SOUTH STREET

PLAN