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THE ROCKY FLATS LOCAL IMPACTS INITIATIVE

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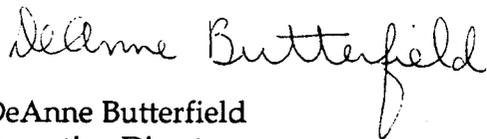
Jessie Roberson
Manager
DOE Rocky Flats Field Office
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Golden, CO 80402-0464

Dear Jessie:

On behalf of the Rocky Flats Local Impacts Initiative and the RFFO-RFLII Industrial Area Transition Task Force, I am pleased to transmit the final report of the Task Force. This report reflects a thirteen-month process involving key stakeholders from local governments, the private sector, regulators, and community interests. The work of the Task Force was augmented by technical consultants who assessed economics, building condition, site infrastructure, and environmental issues. In addition, there was extensive public outreach and briefings to all local governments and the Citizen's Advisory Board prior to final action. The recommendations contained in the report represent a consensus of all members of the Task Force, with endorsement by the RFLII Board of Directors on August 27, 1998.

We appreciate the committed participation of John Rampe of your staff who served as co-chair of the Task Force. We look forward to continued dialog over the next few years, as the Rocky Flats cleanup plan is implemented, to maximize its alignment with these recommendations. Thank you again for your continuing support and cooperation.

Sincerely,



DeAnne Butterfield
Executive Director

Enclosure: Final Report of Rocky Flats Industrial Area Transition Task Force

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From Swords to Plowshares

REPORT OF THE ROCKY FLATS INDUSTRIAL AREA TASK FORCE



ROCKY FLATS INDUSTRIAL AREA TRANSITION TASK FORCE

FROM SWORDS TO PLOWSHARES

*A Plan for the Reuse of the Industrial Area
of the Rocky Flats Environmental Technology Site*

Presented to

**THE ROCKY FLATS LOCAL IMPACTS INITIATIVE FOR
THE U.S. DEPARTMENT OF ENERGY, KAISER-HILL,
AND THE PEOPLE OF COLORADO**

By

THE ROCKY FLATS INDUSTRIAL AREA TRANSITION TASK FORCE
With PBS&J, ERO Resources Corp., Higginbotham/Briggs & Associates,
Leland Consulting Group and Belsten & Associates

Contents

Contents	2
Executive Summary	4
1. Introduction.....	13
2. Background	14
<i>FUTURE SITE USE WORKING GROUP</i>	<i>14</i>
<i>INDUSTRIAL AREA TRANSITION TASK FORCE</i>	<i>15</i>
<i>PRELIMINARY TASK FORCE PROCESS</i>	<i>16</i>
<i>PUBLIC INVOLVEMENT.....</i>	<i>16</i>
<i>OBJECTIVES OF THE INDUSTRIAL AREA TASK FORCE.....</i>	<i>17</i>
<i>A DEFINITION FOR ROCKY FLATS CLEANUP</i>	<i>17</i>
2. Technical Analyses.....	19
<i>CONSULTING TEAM TECHNICAL SUPPORT</i>	<i>19</i>
<i>MARKET ANALYSIS.....</i>	<i>19</i>
<i>ENVIRONMENT.....</i>	<i>24</i>
<i>INFRASTRUCTURE.....</i>	<i>27</i>
<i>EXISTING BUILDINGS.....</i>	<i>30</i>
3. Planning Concepts	34
<i>OVERVIEW.....</i>	<i>34</i>
<i>REGIONAL CONTEXT.....</i>	<i>34</i>
<i>PLANNING AREAS</i>	<i>35</i>
<i>REUSE PHASING.....</i>	<i>35</i>
<i>PLANNING ASSUMPTIONS</i>	<i>38</i>
4. Options for Future Use.....	39
<i>OVERVIEW.....</i>	<i>39</i>
<i>SCENARIO 1: INDUSTRIAL REDEVELOPMENT.....</i>	<i>42</i>
<i>SCENARIO 3: UNIVERSITY/FEDERAL LABORATORY R&D CENTER.....</i>	<i>46</i>
<i>SCENARIO 4: SINGLE TENANT, "JEWEL" USE</i>	<i>48</i>
<i>SCENARIO 5: COLD WAR MUSEUM AND ARCHIVE</i>	<i>50</i>
<i>SCENARIO 6: OPEN SPACE.....</i>	<i>52</i>

5. Implementation Strategies 54

"AGGRESSIVE AND TIMELY REUSE" 56

"PRESERVING OPTIONS" 58

"HANDS-OFF" 60

6. Task Force Recommendations 62

TASK FORCE CONSENSUS RECOMMENDATION 62

PRINCIPLES FOR THE ROCKY FLATS LOCAL IMPACTS INITIATIVE SUCCESSOR 63

Appendices..... 65

SUMMARY OF PUBLIC ENGAGEMENT PROCESS

LIST OF INFORMATIONAL INTERVIEWS

LOCAL GOVERNMENT BRIEFINGS

FUTURE SITE USE WORKING GROUP PARTICIPANTS

Executive Summary

This final report of the Rocky Flats Industrial Area Transition Task Force is presented to the Rocky Flats Local Impacts Initiative for the U.S. Department of Energy (the federal agency that manages Rocky Flats), Kaiser-Hill (the principal cleanup contractor), and the people of Colorado. The report outlines the future prospects and possibilities that Colorado residents want to see realized as Rocky Flats is cleaned up and turned over to the community. Also described is the process the Task Force followed in reaching these recommendations.

The Task Force is a public-private committee jointly convened by the Rocky Flats Local Impacts Initiative (the community reuse organization designated for Rocky Flats), and DOE's Rocky Flats Field Office. The Task Force was asked to develop a plan and implementation strategy to convert the Industrial Area at Rocky Flats after cleanup into an employment center or other use which contributes to the economic vitality of the region.

Over a period of 11 months the Task Force, staff of the Local Impacts Initiative, resource experts and a consultant team headed by Post, Buckley, Schuh and Jernigan, Inc. (PBS&J) met monthly to:

- Review reports affecting reuse, especially that of the Future Site Use Working Group (1995), and the Rocky Flats Cleanup Agreement (1996);
- Review comments and recommendations from stakeholders;
- Review findings of the consultant team concerning reuse potential of Rocky Flats buildings and infrastructure, regional markets for reuse options, and environmental conditions;
- Discuss a range of possible future uses;
- Develop scenarios for possible reuse;
- Develop strategies for implementing the scenarios;
- Discuss the scenarios and strategies with a wide range of community interests; and
- Finalize and document reuse recommendations.

Mission and Objectives of the Industrial Area Task Force

The mission of the Industrial Area Transition Task Force was:

"...to develop and communicate a plan and implementation strategy to convert the Rocky Flats Industrial Area after cleanup into an employment center or other use which contributes to the economic vitality of the region."

The following objectives were adopted by the Task Force to guide the planning process:

- Formulate and implement a successful and effective strategy for engaging the public in decisions and recommendations of the Task Force regarding the future use of the Industrial Area and its transition from DOE uses.
- Conduct a comprehensive inventory/assessment of buildings to determine their suitability for use after cleanup.
- Conduct a comprehensive inventory/assessment of infrastructure to determine its suitability for supporting future use of the site as an employment center or other use.
- Determine the market and economic feasibility of an environmental technology center (or related uses) on-site.
- Analyze alternatives for future services to, and ownership and management of the site to accomplish the future use objectives of the project.
- Develop a concept and recommendations for the future transition of the Industrial Area, facilities and infrastructure.

- Formulate final Task Force recommendations and concepts for the Industrial Area that reflect community concerns and represent the community's preferred alternative for the future use, transition and disposition of the site.

Public Involvement

On February 17, 1998 the Task Force initiated an intensive six-week public involvement process, including a variety of opportunities for public comment. The media, city and county governments, and community groups were briefed on the project. Many comments were received from individual citizens through the various channels provided. Several city councils and other organizations issued resolutions outlining their preferences for site reuse and discussions on Rocky Flats reuse were reviewed within neighboring communities. A second public comment period occurred from July 8, 1998 through August 21, 1998 for review of the final recommendations.

Overview of the Technical Analyses

Market

The Northwest sector in which the Rocky Flats site lies will capture an increasing share of future growth in the Denver metropolitan area. In the next ten years most of that growth will occur along the U.S. Highway 36 corridor.

Although opportunities for short-term use of the existing buildings may exist for subcontractors involved in the site cleanup, the retention of buildings at Rocky Flats will not likely facilitate the long-term redevelopment of the site.

The success of a long-term economic development alliance between the Rocky Flats facility and the local community will depend on prevailing market and economic conditions, broad-based support and cooperation from key public and private stakeholders, improvements to infrastructure for the site, and a balanced perspective on the facility's historical activities.

1. Current market conditions include:

- Increasing share of development growth in Northwest Metro Area
- Rocky Flats is a secondary location within the Northwest Metro Area
- Limited market support for rehabilitation or re-use of existing structures
- Public investment in transitional uses could facilitate redevelopment
- Future industrial development depends on private sector demand – currently being met by other sites

2. Positive business location factors at Rocky Flats:

- Proximity to the U.S. Highway 36 Corridor
- Highly-skilled labor in Jefferson County
- Relatively low-cost utilities
- High quality of life in surrounding area

3. Negative business location factors at Rocky Flats:

- Negative perception of historic on-site activities
- Relatively poor transportation linkages and access
- Lack of development identity
- Other nearby industrial sites

4. Users that are most likely to locate at Rocky Flats:

- Light Industrial
- Research & Development
- High Tech

Environment

- The federal government owns none of the sub-surface mineral rights of the Industrial Area.
- The Energy Department hopes to start shipping plutonium off-site in 2002. Commercial use of the Industrial Area will be severely restricted as long as plutonium remains on-site.
- Cleanup of the Protected Area may result in some or all of the area being capped and future access restricted.
- The Cleanup Agreement requires that surface and ground water leaving site be acceptable for all uses. Future site restrictions will include prohibition on use of site ground water for drinking water.
- Habitat for Preble's meadow jumping mouse (a species that has been listed by the federal government as threatened) is found in the Buffer Zone but is unlikely to affect development of the Industrial Area.
- Xeric tallgrass prairie found at Rocky Flats is very rare in Colorado and one of the largest remaining stands in North America. It could restrict development west of the Industrial Area.
- Significant wetlands and riparian areas exist in the Buffer Zone, but wetlands in the Industrial Area are unlikely to affect future development.
- Rocky Flats Historic District status requires only photo documentation and is unlikely to affect future development of the Industrial Area.
- Constraints to the commercial use of the Industrial Area during cleanup include health, safety and security concerns related to plutonium and cleanup activities.

Infrastructure

- Primary infrastructure at Rocky Flats includes potable water, sanitary sewer, natural gas, electrical power, and roads. Other systems include steam, solid waste, fire protection/hazardous materials, security, telecommunications, and rail service. Current systems are generally in fair condition.
- DOE plans to operate current systems to failure and abandon in place portions of uncontaminated subsurface systems.
- The cost of new water/sewer to reach the site and rehabilitation of on-site infrastructure could cost \$3-5 million.
- On-site cleanup might be coordinated with new water/sewer to reach the site and benefit future development of site.

Existing Buildings

Seven buildings at Rocky Flats were considered for reuse (totaling 411,000 square feet): Buildings 125, 130/130W, 131, 440,460 and 850. (Two other buildings were set aside for the National Conversion Pilot Project, which was later cancelled by DOE.) The buildings are currently in fair to good condition. Kaiser-Hill currently projects that the buildings will become surplus between 2003-2009. Maintenance costs of existing buildings (based on private sector) would be \$2-\$4/square foot per year.

Some buildings could be marketable if offered at low cost, but none are attractive for major long-term anchor tenants. Future environmental technology users likely to want "build-to-suit" facilities rather than refurbished buildings.

The Task Force investigated the symbolism and marketing potential of leaving some buildings standing. Conducting site cleanup around existing buildings is complicated, expensive and requires "buy-in" by Kaiser-Hill.

Planning Concepts

The Task Force formulated a number of planning concepts for the Industrial Area which were fundamental in developing reuse alternatives for the Industrial Area as well as the strategies to implement them.

Regional Context

Transportation - The future use of the Rocky Flats Industrial Area should both anticipate and influence plans for future regional transportation improvements in the area.

Growth Patterns - Planning concepts for the Rocky Flats Industrial Area should consider the impact of future site use relative to the anticipated growth patterns of the surrounding cities.

Employment Centers - Planning concepts for the Rocky Flats Industrial Area should consider its potential role as an employment center and how this relates to existing and planned employment centers in the northwest metropolitan area.

Open Space - The future use of the Rocky Flats site should help to reinforce the established regional framework of open space.

Reuse Phasing

Factors that will influence the phasing of site reuse include:

- The sequence of cleanup that could free up western portions of the Industrial Area prior to cleanup of the remainder of the entire site.
- Whether new water lines and sewer lines are extended from SH-72 to the north along SH-93.
- Condition and availability of existing water lines and access roads that extend into the Industrial Area from the west.
- Location of the more usable buildings in the western portion of the Industrial Area.
- The presence of surface mining for the next 20 to 30 years along the western boundary of the Buffer Zone.

Based upon these and other factors, it appears reasonable that reuse of the site could begin from the west and proceed to the east.

Options for Future Use

The Task Force developed six reuse scenarios for the Rocky Flats Industrial Area, but recognized that specific decisions about reuse can only be made several years into the future when more is known about the disposition of plutonium and the nature, extent, and timing of cleanup and waste removal. The scenarios were developed to illustrate the types of uses the Task Force believes should be reserved as future choices. They are not recommendations per se, although each has champions on the Task Force and in the community. They serve, instead, to define a range of choices that future residents and decision-makers should have preserved.

The six scenarios are:

SCENARIO 1: Industrial Redevelopment as an employment center with an emphasis on manufacturing, technology and office/commercial uses.

SCENARIO 2: Eco-Industrial Park would emphasize the proximity of the Industrial Area to the former remediation site and ecological resources of Buffer Zone and would target environmental services and technology companies.

SCENARIO 3: University/Federal Laboratory and R&D Center capitalizes on the proximity of the site to NREL, NOAA, NIST, NCAR, Federal offices, universities, non-profit organizations and private technology sector businesses.

SCENARIO 4: Single Tenant –“Jewel” Use would reserve the site for a future single tenant—currently unknown—that captures the imagination of the community 10, 15 or 25 years in the future.

SCENARIO 5: Cold War Museum and Archives is an option that interprets the Cold War (including the Peace Movement) and the role played by the Rocky Flats Nuclear Weapons Plant.

SCENARIO 6: Open Space would be the ultimate use of the Industrial Area under this scenario. This would allow the Industrial Area to be fully integrated with the surrounding 6,100 acres of the Buffer Zone, which has already been targeted for preservation and management as open space.

Implementation Strategies

The Task Force developed and evaluated three strategies for transferring control of the Industrial Area from DOE to the community after cleanup. These alternatives were formulated to represent clearly different approaches to undertaking reuse of the Industrial Area and are based upon the assumption that ultimately the site will be suitable for uses ranging from full development to open space.

A. “Aggressive and Timely Reuse”

This strategy seeks to accelerate the reuse of the site to the maximum degree possible. The community would promptly form a reuse authority with the ability to finance infrastructure and lease buildings. This entity would work closely with the U.S. Department of Energy (DOE) to determine opportunities for joint development and financing of infrastructure as well as allow for the rapid phasing of ecological restoration of disturbed areas. Reuse options to be considered range from open space to active development. Some existing buildings could be converted to commercial use in coordination with cleanup to minimize holding costs. Reuse could be phased as specific areas are made available to the community. A marketing program would be developed to attract potential tenants. This strategy could provide the earliest economic benefits to the community, but would also require greater public investments early on.

B. “Preserving Options”

This strategy seeks to respond to the inherent uncertainties of cleanup. The community would create a formal mechanism to plan, advocate and cooperate on issues related to Rocky Flats’ future. The contractor, Kaiser-Hill, proceeds according to the cleanup plan and removes all buildings and infrastructure – while the community closely monitors the process to ensure that cleanup leaves the site in a condition that facilitates future use. As the completion of cleanup approaches and a firm schedule is established for removal of plutonium and wastes, the community would form a reuse authority to implement reuse. Reuse options to be considered range from open space to active development. Infrastructure costs may be higher in this option because the community would proceed without DOE as a partner – but costs would be delayed until specific tenants or uses are identified. The community would not have to pay to refurbish buildings or infrastructure, but instead would be responsible for developing and financing infrastructure and otherwise facilitate reuse.

C. "Hands-Off"

In this strategy, the community does not engage in a formal, coordinated action related to the future site reuse until cleanup is nearly complete. The community would recommend that DOE leave the Industrial Area in a condition suitable for use as an employment center, but implementation of this would be left to the cleanup contractor, Kaiser-Hill, with oversight by the individual communities which are most affected. Once cleanup is complete and the post-cleanup conditions of the site are better known, the communities would reconvene and determine the desired use of the site and the preferred implementation mechanism – based upon conditions at the time. Options to be considered range from open space to active development. Although this strategy is least expensive in the short term, it also results in the greatest uncertainty about post-cleanup conditions of the site and may forgo opportunities that arise in the mid-term.

Conclusions

At its meeting on June 8, 1998, the Task Force reached consensus on the following:

Task Force Consensus Recommendation

- The Task Force concluded that it is clear from its research that specific decisions for future use of this land cannot be made at this time. Future decisions and conditions will all affect the community's consideration of the precise use of this land after site closure for which DOE has set a goal of 2006. These include disposition of plutonium, the nature and extent of environmental remediation, condition of the site at the completion of cleanup actions, future market conditions, public sentiment, and development activities in the region. It is clear that the entire Rocky Flats site is highly valued by the community and we are willing to continue cooperative efforts to assure a stringent cleanup that will preserve a range of options for the future.
- The Task Force evaluated the reuse potential of seven buildings at Rocky Flats: 125, 130, 130W, 131, 440, 460, and 850 as well as existing infrastructure. Following thorough analysis, the Task Force concluded that while four facilities-130, 130W, 131 and 460- could be made viable in the year 2010, these buildings are not essential for the successful reuse of the site, even for an industrial center. If a future use is selected that necessitates facilities and/or infrastructure, they would be constructed according to specifications of future users at that time. Therefore, in order to not encumber site closure, the Task Force recommends that all facilities and infrastructure be decontaminated, demolished, and removed as part of the Rocky Flats cleanup and closure project. If any new facilities or infrastructure are developed by the site prior to closure, such arrangements should be planned and implemented in conjunction with the community to assure preservation of future options and interim benefits to the community.
- In this context, there are implications for the conduct of the Rocky Flats cleanup. It is clear from the discussions within the Task Force and input from the public during our process that the protection of public, worker and ecological health during and after Rocky Flats cleanup is the paramount concern of the public. We support the requirement in the Rocky Flats Cleanup Agreement to clean up the Industrial Area to a standard suitable for a future employment center regardless of other potential uses. The cleanup plans must consider two elements: preserving a range of future use options and taking into account long term stewardship implications for ongoing protections of public health and the environment.

Task Force Consensus Recommendation (cont'd)

- Covers or caps should be utilized only in situations where sufficient technology does not exist to remediate sufficiently to assure acceptable risks, not just to save money. If caps or covers are utilized, their design must accommodate both long term stewardship and compatibility with adjacent future uses. The potential of future breakthroughs in cleanup technology should also be considered and preserved in the design of cleanup actions. If current projections for off-site disposition of special nuclear materials and waste are not realized, interim treatment and storage facilities-both new construction and reutilization of existing buildings-should be located in light of potential future use options which favor the western portion of the site. Therefore, locations in the present Protected Area and eastern Industrial area should be utilized for any long term DOE missions in lieu of locations in the Buffer Zone, adjacent to the western entrance road, the 130 area, or west of Building 460. Finally, the cleanup plan should be modified to remove clean, residual, unusable infrastructure such as foundations, utilities, pipes, tanks, and tunnels as their retention would be an impediment to future redevelopment. All potential future uses would require removal of these materials.
- The Rocky Flats site has provided and continues to provide thousands of jobs and concomitant revenues and other benefits to adjacent communities. As the Rocky Flats site is transitioned to local control* there are likely to be other measures beyond potential redevelopment of the Rocky Flats Industrial Area that can enhance the quality of life and economy of the Northwest Metro Area. These should be identified and pursued cooperatively by DOE and its contractors, local governments and the private sector.
- The community, through the cooperation of its local governments, should establish an ongoing entity with authority, resources, and credibility to oversee the cleanup and other activities at the Rocky Flats site to assure compatibility with community interests and preservation of future use options. This entity would plan the transition of the entire Rocky Flats site to local control* after cleanup and closure, and assure its implementation. It would also negotiate a long term stewardship agreement with DOE. Principles for this entity are discussed in the following section.
- Several other issues were discussed by the Task Force, its consultants, constituent local governments, and the general public during the course of our deliberations that are beyond the purview of the Industrial Area Transition Task Force. These include Buffer Zone open space preservation, the mountain backdrop project, highway safety and planning, worker transition, regional planning, documentation and interpretation of Rocky Flats' role in the Cold War, and long term stewardship. We acknowledge the salience of these issues and encourage that they be discussed in the near future in appropriate forums. However we as a Task Force do not have recommendations about these adjunct issues. We also note that there is great interest on the part of the general public in the future of Rocky Flats and encourage continuation and enhancement of opportunities for education and dialogue about all these issues.

*Note: In using the term "local control", the Task Force did not intend that all responsibility for the site shift from the federal government. As stated above, the federal government must retain ongoing responsibility for residual contamination and operation/maintenance of any institutional controls put in place to protect public health. The term "local control" is intended to convey that after DOE completes cleanup, decisions about the use and management of the land and resources should be made at the local level consistent with any necessary controls.

The Task Force also reached consensus on the following principles regarding the Rocky Flats Local Impacts Initiative Successor:

Principles for the Rocky Flats Local Impacts Initiative Successor

Proposed Mission Statement

- Provide an effective, credible and accountable mechanism for affected local governments and their citizens to jointly identify, evaluate, discuss, communicate, resolve and advocate for issues of mutual concern relating to the future of the Rocky Flats Environmental Technology Site during cleanup; and serve as the agent of the community to plan and implement transition of the Rocky Flats site from the Department of Energy to local control.

Proposed Purposes

- The purposes will evolve as cleanup proceeds. In the near term, the focus will be on assuring that actions and policies of DOE and other decision makers protect the site and the public health and preserve land use options for the future. As more is known about the disposition of special nuclear materials and waste and the nature and extent of environmental remediation and its effect on the configuration of the site, the entity can plan for long term preservation and management of the Buffer Zone as open space, negotiate long term stewardship agreements with DOE to ensure ongoing information about and protection of public health and the environment following cleanup, and discuss other issues such as transportation rights of way, regional plans, potential infrastructure, and future use of the Industrial Area.
- Once cleanup is nearing completion, the focus will again change to implementing transition of the land to local control, consistent with the plan. During all these phases, the entity will assure that past community efforts (such as the Future Site Use Working Group and Industrial Area Transition Task Force) are respected, and will serve as their advocate and interpreter.
- Ongoing functions would be to represent the community's interests in the land and its resources at regional planning discussions, serve as a focal point for community partnerships with DOE and its contractors for issues of mutual interest such as transportation safety improvements and natural resource management, promote public participation and information regarding Rocky Flats, and advocate policies, plans and activities with local, state and federal officials and the public. Depending on the decisions about future land management and stewardship, there may or may not be an ongoing role for this entity after the site is transitioned to local control.

Proposed Composition

- The entity primarily should be a mechanism for local governments to cooperate and make joint decisions concerning Rocky Flats transition and to create a local "agent" to act on behalf of the community's interest in the land resource with DOE and the region. Its powers should include those of a redevelopment authority for maximum future flexibility in brokering reuse planning and implementation. Although they may not necessarily serve on the governing board, substantive involvement by other affected stakeholders, including owners of adjacent land and mineral rights, should also be provided for. The Rocky Flats site is contiguous to Boulder and Jefferson Counties, the cities of Broomfield, Westminster and Arvada, and the Town of Superior. The City of Boulder owns significant open space land contiguous to site on the north and the State of Colorado Land Board owns a parcel to the south.

Principles for the Rocky Flats Local Impacts Initiative Successor (cont'd)

- Governmental powers such as immunity, ability to receive donated federal property, open meetings and open records provisions are important. Creation of the entity should be memorialized in a way that demonstrates its credibility to the federal government and the citizens of the region, and should include some mechanism for endorsement by the State of Colorado. It should meet DOE Office of Worker and Community Transition criteria for designation as a Community Reuse Organization in order to qualify for CRO preferences and funding. The new entity's name should reflect the new mission and not be called "RFLII." At the same time, positive lessons learned from the success of RFLII should be incorporated into the charter, governance and operation of the new entity.

Potential Funding

- RFLII has set aside some funds to provide operational support for a smooth transition to a new entity. It must meet DOE criteria for inclusion and participation to be designated as the Community Reuse Organization, gain the preferences that accompany this designation, and be eligible for receipt of these Community Transition funds. Since the entity would be working with state and federal legislators on behalf of its members, local funding should be made available for political activities—probably from local governments and the private sector.
- For the portion of its work relating to future use and long term stewardship, DOE funding is possible. There are various state programs that could be approached for efforts to transition the Buffer Zone to open space protection, including Great Outdoors Colorado and the Colorado Department of Public Health and Environment. Public information/education activities could also be supported by state and federal agencies.

1. Introduction

With the end of the Cold War the mission of the U.S. government's facility at Rocky Flats (Colorado) changed from nuclear weapons production to risk reduction, waste management and environmental restoration. This cleanup, which will extend over ten or more years, is preparing the way for an even more radical change for the site: reuse with community-determined land uses.

This report recommends what the range of those future uses might be in the central Industrial Area. It was drafted by the second of two broad-based citizen groups that have considered reuse of Rocky Flats.

In 1995 the first effort, conducted by the Rocky Flats Future Site Use Working Group, made two major recommendations: 1) that nearly all of the site's 6065-acre, ecologically rich buffer area be preserved and managed as open space following its use by the U.S. Department of Energy; and 2) following cleanup, the 385-acre Industrial Area—at the heart of Rocky Flats—be returned to use as an employment center to compensate for loss of jobs and revenues associated with weapons production. (In the early 1990's, Rocky Flats employed over 8,000 workers with a payroll of \$250 million and an annual budget of over \$700 million.)

Building on the recommendations of the Future Site Use Working Group, the current Rocky Flats Industrial Area Transition Task Force has reviewed present and likely future conditions of the Industrial Area, conducted public forums, and developed implementation recommendations for the Industrial Area. These recommendations, presented in this report, are being conveyed to the Rocky Flats Local Impacts Initiative for presentation to the U.S.

Department of Energy and its main cleanup contractor, Kaiser-Hill, so that they can be incorporated into DOE's 1999 work plan for Rocky Flats. The Task Force also hopes its work can provide a basis for continued intergovernmental and community cooperation in planning for the future of the site.

It is important to note that, while the recommendations of the Industrial Area Transition Task Force depend on and assume appropriate cleanup of the site and should guide DOE's cleanup to some degree, the Task Force's mission is to develop a plan for reuse after cleanup, not to determine the specifics of cleanup. (For more information about cleanup, visit the Rocky Flats Reading Room at Red Rocks Community College or contact the Rocky Flats Citizen Advisory Board at 303-420-7855.)

Key acronyms and terms

Buffer Zone — The 6065 undeveloped acres surrounding the Industrial Area

CDPHE — Colorado Department of Public Health and Environment

DOE — U.S. Department of Energy

EPA — U.S. Environmental Protection Agency

Industrial Area — The 385-acre core of the site

Kaiser-Hill — The principal cleanup contractor at Rocky Flats

RFCA — Rocky Flats Cleanup Agreement

RFETS — Rocky Flats Environmental Technology Site

RFLII — Rocky Flats Local Impacts Initiative

2. Background

The Rocky Flats Industrial Area Transition Task Force has acted on the 1995 land-use recommendations of the Future Site Use Working Group—a community-based committee with broad representation.

FUTURE SITE USE WORKING GROUP

The Future Site Use Working Group was convened by the Rocky Flats Local Impacts Initiative (RFLII), the designated community reuse organization, in April 1994 to:

“Develop long-term future use options for the Rocky Flats site. The Department of Energy, Environmental Protection Agency, and Colorado Department of Public Health and Environment will use the long-term future site uses as input into their cleanup decisions. The future use options are also available for use as input into planning and development decisions of local governments, economic development agencies, and surrounding landowners.”

The Working Group had representatives of a variety of stakeholders, including economic interests, environmental interests, peace and health interests, Rocky Flats workers and unions, major adjacent landowners, homeowners associations, and city and county governments. The U.S. Department of Energy (DOE), the Environmental Protection Agency (EPA), and the Colorado Department of Public Health and Environment (CDPHE) participated as ex-officio members. A list of Working Group participants is provided in the Appendix.

In July 1995, the Working Group completed its recommendations following a year of research, analysis, public participation, and consensus-building. The group recommended that nearly all of the 6065-acre buffer zone be preserved and managed as open space following its use by the DOE, due to its ecological significance and the presence of wetlands, steep slopes and unstable soils. To compensate for the loss of jobs and revenues, the Working Group also recommended that, following cleanup, the 385-acre Industrial Area once again be an employment center. These same recommendations were generally adopted as the basis for the interim cleanup standards in the Rocky Flats Cleanup Agreement (RFCA) signed in 1996. Other recommendations included:

- Leaving the door open for additional cleanup, ideally to background levels, when technology becomes available and it could be done in a cost-effective, environmentally sensitive manner;
- Acquiring mineral rights through a fair process;
- For the DOE to provide transportation right-of-way in the northwest section of the site if requested by the community; and

The Rocky Flats Local Impacts Initiative (RFLII)

- Was created in 1991 by 12 cities and counties affected by the downsizing of the Rocky Flats Plant.
- Seeks to analyze the economic impacts of the change in mission at Rocky Flats from weapons production to cleanup.
- Conducts programs to help mitigate those impacts
- Helps plan for the future of the site.
- Has a board of 20 persons representing local governments, labor unions, neighbors, economic development organizations, small business, and community-based interest groups.
- Is funded by the U.S. Department of Energy.
- Convened the Future Site Use Working Group in 1994.
- Convened the Industrial Area Transition Task Force in 1997.

The Rocky Flats Industrial Area Transition Task Force

- Emily Holiday, RFLII Board/Task Force Co-Chair
- John Rampe, DOE/Task Force Co-Chair
- Chuck Baroch, Golden City Council
- Tom Brunner, Broomfield City Council
- Samantha Dixon, Westminster City Council (Alternate)
- Joseph Dunn, CRESCO Properties, Jefferson Economic Council
- Bob Dyer, RFLII Board Chair, Arvada City Council
- Mary Harlow, City of Westminster (
- Kermit Hodge, Director of Environmental Health and Safety, Samsonite Corporation
- Ken Korkia/Brady Wilson (non-voting), Rocky Flats Citizen Advisory Board
- Irene Kornelly, Colorado Office of Business Development
- Robb Lapp, Coal Creek Canyon Resident
- Carol Lyons, City of Arvada (Alternate)
- Jim Purvis, Stone and Webster
- Steve Tarlton, Colorado Department of Public Health and Environment
- Richard Turner, Jefferson County Dept. of Planning and Zoning
- Luanne Williams, Northwest Metro Chamber of Commerce
- Martin Transue, Rocky Flats Employee

Rocky Flats Local Impacts Initiative

- DeAnne Butterfield, Executive Director
- Will Neff, Community Reuse Program Manager
- Sara Taylor, Program Assistant

Consultant Team

- PBS&J: David Cooper, Patrick Quinney, Steve Whiteford
- ERO Resources Corp.: Richard Trenholme, Paul Hellmund
- Higginbotham/Briggs and Associates: Stuart Coppedge
- Leland Consulting Group: Anne Tankersley, Bill Cunningham, Erika Lindholm
- Beltsen & Associates: Laura Beltsen

- Considering the Industrial Area for “adjunct environmental technology activities” even while cleanup is underway.

INDUSTRIAL AREA TRANSITION TASK FORCE

The Industrial Area Transition Task Force was convened in July 1997 by the Rocky Flats Local Impacts Initiative and the Department of Energy’s Rocky Flats Field Office. The mission of the Task Force was:

“...to develop and communicate a plan and implementation strategy to convert the Rocky Flats Industrial Area after cleanup into an employment center or other use which contributes to the economic vitality of the region.”

The Task Force was asked to take the recommendations of the earlier Working Group and the Rocky Flats Cleanup Agreement and help better define the meaning of “employment center” and its implications for cleanup planning. The composition of the Task Force is listed above.

PRELIMINARY TASK FORCE PROCESS

The preliminary phase of the project involved data gathering and analysis, performed by a consultant team selected by the Task Force. The consultant team was led by Post, Buckley, Schuh and Jernigan, Inc. (PBS&J, Inc.), an international planning and engineering firm, and included specialists from Belsten and Associates, ERO Resources Corporation, Higginbotham Briggs and Associates, and Leland Consulting Group. The consultant team provided research and analysis support for the Task Force in several subject areas, including master planning, public participation, building assessment, infrastructure assessment, environmental conditions, and regional market analysis.

The Task Force met on a monthly basis from July 1997 to June 1998. The first three meetings involved formulating the Task Force process, defining the mission and goals, consultant selection, and project planning. Research and data analysis activities began in September 1997 and lasted approximately two and a half months. Updates were provided to the Task Force by the consultant team at each monthly meeting.

The consultant team interviewed stakeholders during this period and reported back to the Task Force. (A list of those interviewed may be found in the Appendix.)

A full-day Task Force workshop was held in December 1997, during which the consultant team presented five reuse scenarios based on concepts discussed during previous Task Force meetings or stakeholder interviews. (The scenarios were: Industrial Redevelopment, Site as Cold War Memorial with Museum and Research Center, On-site Development with Cold War Memorial and Museum/Research Center, Land Bank for Unique Future Use, and Total Open Space.)

These early scenarios were designed to focus discussion and to help compare characteristics of different forms of reuse (i.e., funding sources, employment potential, regional context, etc.). No particular scenario was favored during the workshop, however support was strong to pursue an on-site development/museum/research center scenario, a land reserve for unique future use, and industrial redevelopment.

Task Force activities during the first two months of 1998 focused on fine-tuning concepts for the upcoming public involvement period and evaluating the DOE's interest in community input on-site reuse. In February, the Task Force approved a set of revised scenarios and a range of implementation strategies to release for public comment.

PUBLIC INVOLVEMENT

On February 17, the Task Force initiated an intensive six-week public involvement process, including a variety of opportunities for public comment. The media, city and county governments, and community groups were briefed on the project. (A comprehensive list of briefings is provided in the Appendix.) The public was invited to comment by telephone, telefax or mail, and an interactive web site (www.votelink.com/rfr) was established to disseminate information and gather public comment via on-line discussion. Over a thousand "Rocky Flats Reuse Planning" newsletters were distributed throughout communities neighboring Rocky Flats. The Task Force held an Open House on March 25, roughly halfway through the comment period, to stimulate discussion and input. All comments were consolidated and distributed to the Task Force members.

Many comments were received from individual citizens through the various channels provided. Several city councils and other organizations issued resolutions outlining their preferences for site reuse and discussions on Rocky Flats reuse were reviewed within neighboring communities.

OBJECTIVES OF THE INDUSTRIAL AREA TASK FORCE

The following objectives were adopted by the Task Force to guide the planning process:

- Formulate and implement a successful and effective strategy for engaging the public in decisions and recommendations of the Task Force regarding the future use of the Industrial Area and its transition from DOE uses.
- Conduct a comprehensive inventory/assessment of buildings to determine their suitability for use after cleanup.
- Conduct a comprehensive inventory/assessment of infrastructure to determine its suitability for supporting future use of the site as an employment center or other use.
- Determine the market and economic feasibility of an environmental technology center (or related uses) on-site.
- Analyze alternatives for future services to, and ownership and management of the site to accomplish the future use objectives of the project.
- Develop a concept and recommendations for the future transition of the site, facilities and infrastructure.
- Formulate final Task Force recommendations and concepts for the site that reflect community concerns and represent the community's preferred alternative for the future use, transition and disposition of the site.

A DEFINITION FOR ROCKY FLATS CLEANUP

The term "cleanup" can be vague and even misleading. For Rocky Flats, the term encompasses a range of activities to reduce risks to human health and the environment from hazardous substances. Elimination or reduction of these risks does not necessarily result in the complete removal of all known contamination. Thus, after "cleanup" there may still be some levels of contamination; thus a "clean" site does not mean that it is free of all contaminants, only that the levels are acceptable based on future uses.

The framework established in the Rocky Flats Cleanup Agreement calls for soil and water to be remediated when certain contaminants (both radiological and chemical) are present above prescribed levels. These "Action Levels" are calculated based on determining an acceptable risk to human health and the environment from various contaminants. For chemicals, this is generally calculated based on cancer deaths, and for Rocky Flats has been determined to be about one lifetime cancer fatality for every 100,000 people who may be exposed to the residual contamination as a user of the open space in the Buffer Zone, as an office worker in the Industrial Area, or through drinking the surface water.

For radionuclides, the concept of acceptable radiation dose is used because there is not strong scientific agreement on the risks of long term exposure to very low levels of radiation. The regulators have determined that the annual exposure dose from residual (post-cleanup) radioactive contamination cannot exceed 15 mrem for an office worker in the Industrial Area or an open space user in the Buffer Zone. Since in the future the restriction on residential use of Rocky Flats could be violated, a calculation was also made as to levels that would result in a dose of 85 mrem per year for someone who resides full time at a home built at Rocky Flats. For comparison purposes, the average background radiation dose for a person in Colorado is about 300 mrem per year.

Using a sophisticated computer model, the dose levels were translated into Soil Action Levels, above which some action must be taken to remove or contain the contamination. The

interim Soil Action Levels for plutonium were established at 562 picoCuries per gram of soil in the Industrial Area and 651 picoCuries per gram in the Buffer Zone. Action Levels were also developed for groundwater. These levels are reviewed annually in light of new information about radiation risks and dose levels. The computer model that translated the risk numbers into doses is also being reviewed by an independent panel to determine the validity of its assumptions and methodology.

At Rocky Flats, a range of activities are generally labeled "cleanup." These include removal of residual radioactive and chemical materials from inside buildings and equipment; preparation, storage and disposal of waste; removal of contamination from walls and fixtures; demolition of buildings after decontamination; excavation and decontamination of soil; collection and treatment of contaminated water; and other related activities.

There may be some areas of the site such as the former solar evaporation ponds and the landfill where contamination has spread to depths or configurations that make it technically or financially difficult to thoroughly remove. In these cases, protective fill or caps may be used to help shield the remaining contamination from water or wind movement, burrowing animals, and contact with humans. Access restrictions to portions of the site through signs and fences are also possible as a means to reduce future risk to humans. Measures will also be put in place to prevent future use of the site for residential purposes. Specific decisions about the nature and extent of cleanup for individual locations will be made on a case-by-case basis as the cleanup project proceeds.

The determination that the site has been "cleaned up" will be through approval of a "Record of Decision" by EPA and the Colorado Department of Public Health and Environment at the end of the planned cleanup schedule. At that time, a decision will be made by regulators whether necessary and sufficient activities have been completed, that acceptable risk/dose levels are likely to result, and that ongoing stewardship responsibilities are adequately provided for. It is unknown today whether or how the regulators may provide for future, additional cleanup if technology improves or if present-day assumptions about radiation risks and doses are proven wrong.

2. Technical Analyses

CONSULTING TEAM TECHNICAL SUPPORT

The Task Force selected an experienced team of planning and technical consultants to assist it in developing a plan for the reuse of Rocky Flat's Industrial Area. In addition to planning (PBS&J), the team included experts in infrastructure assessment (PBS&J), regional market analysis (Leland Consulting Group), environmental conditions and nature conservation (ERO Resources Corp.), architecture and building reuse (Higginbotham/Briggs & Associates), and public participation (Belsten & Associates).

The consultants' technical reports are available separately. Summaries of the reports follow.

MARKET ANALYSIS

A market and economic assessment was prepared of projected growth impacts in the market area surrounding Rocky Flats. This assessment provided guidance in anticipating where development opportunities may occur in both the short- (1998 to 2006) and long-term (2006 to 2015). It also offered empirical evidence of development trends with respect to user profiles and preferred real estate product types. Armed with this type of assessment, the Rocky Flats Industrial Area Transition Task Force could have confidence that the land-use plan derived from this process was grounded in market and economic reality.

Summary of Key Findings

- The Northwest sector in which the Rocky Flats site is situated will capture an increasing share of future Denver metropolitan area development growth, with most of the growth in the next ten years occurring along the U.S. Highway 36 corridor. Without improvements to access, i.e., "Northwest Parkway," the Rocky Flats site and surrounding area will continue to be a secondary development location within the Northwest sector during this time period.
- Although opportunities for short-term utilization of existing buildings may exist for subcontractors involved in the site environmental remediation effort, the retention of buildings at Rocky Flats will not likely facilitate the long-term redevelopment of the site. Unlike other redevelopment sites in the region, the existence of buildings serving as a reminder of previous activities may in fact deter redevelopment efforts at Rocky Flats. A "healing" process to overcome this negative perception may be accelerated by public investment in transitional uses.

Market Analysis

1. Current Conditions:

- Increasing share of development growth in Northwest Metro Area
- Rocky Flats is a secondary location within the Northwest Metro Area
- Limited market support for rehabilitation or re-use of existing structures
- Public investment in transitional uses could facilitate redevelopment
- Future industrial development depends on private sector demand – currently being met by other sites

2. Positive business location factors at Rocky Flats:

- Proximity to the U.S. Highway 36 Corridor
- Highly-skilled labor in Jefferson County
- Relatively low-cost utilities
- High quality of life in surrounding area

3. Negative business location factors at Rocky Flats:

- Negative perception of historic on-site activities
- Relatively poor transportation linkages and access
- Lack of development identity
- Other nearby industrial sites

4. Users that are most likely to locate at Rocky Flats:

- Light Industrial
- Research & Development
- High Tech

- Positive business location variables which could enhance Rocky Flats' future competitive position include its proximity to the U.S. Highway 36 corridor, the availability of highly-skilled labor, relatively low-cost utilities, and a high quality of life in the surrounding area.
- Negative business location variables which could diminish Rocky Flats' future competitive position include the negative perception associated with historic on-site activities, relatively poor transportation linkages and access (if not improved) and the potential lack of development identity, if destination-oriented development does not occur nearby.
- Users that are most likely to locate at Rocky Flats include light industrial, research & development, and high tech industries. These are similar to users already represented within the Northwest sector. The facility requirements for these industries are relatively unique, thereby supporting build-to-suit, *not* rehabilitation or re-use, opportunities.
- The success of a long-term economic development alliance between the Rocky Flats facility and the local community will depend on prevailing market and economic conditions, broad-based support and cooperation from key public and private stakeholders, improvements to infrastructure for the site, and a balanced perspective on the facility's historical activities.

Market Analysis by Land-Use Type

Overall Market Opportunities and Constraints

The first step in the market analysis of various land-use types was to set the market context for the Denver metropolitan area, the Northwest sector, and the Rocky Flats site. Opportunities and constraints within this market context form the foundation of the development projections. These factors include:

- The current plan for cleanup at the Rocky Flats site calls for completion by the year 2006 – 2010 (a date which depends on the availability of funding for cleanup and approval of receiver sites for plutonium and other wastes). Over the next nine years, then, the site will be in various stages of cleanup. Full reuse and/or redevelopment of the site cannot therefore take place until after 2006, at the earliest.
- Recent and current office and industrial development patterns in the northwest sector of the Denver metropolitan area that are clustered along U.S. Highway 36 in developments such as Interlocken, Church Ranch and Centennial Valley, will continue into the foreseeable future and will accelerate as a critical mass of companies and industries is established.
- Due to its relatively remote location and difficult access within the Northwest sector, the Rocky Flats site is currently considered a secondary location for development growth.
- The Denver metropolitan area will be in a unique, yet challenging, development position for the near and long-term, with the introduction of four major mixed-use, infill developments (Stapleton, Lowry, Fitzsimons, and Central Platte Valley), all competing to attract private investment in the form of office and industrial development.
- The Rocky Flats site, and the area surrounding it, will face potential competition for development growth from these and other large-scale projects throughout the Denver metropolitan area. These include the U.S. Highway 36 Corridor, the Denver International Airport Gateway area, the Lowry Redevelopment project, the Stapleton Redevelopment project, and the I-70 East, I-70 West, I-25 South and E-470 Corridors.

Office Development

Historical Development

- Historical office development absorption in the Denver metropolitan area has averaged 1.3 million square feet annually over the past eight years.
- Over the past eight years, the Northwest sector's share of historical office absorption was approximately 2.6%. The Northwest sector's overall share of existing office development is approximately 3%.
- The Northwest sector's office inventory has historically consisted of local service professional space. In comparison to regional office concentrations such as Downtown Denver and the Denver Tech Center, the Northwest office market has historically been considered a Class "B" or "C" submarket. In recent years, however, office concentrations have emerged in business parks along the U.S. Highway 36 Corridor, e.g., Interlocken, Centennial Valley and Church Ranch. These concentrations include Class "A" office and/or "flex" space, which serves both office and industrial tenants. Development at Interlocken, in particular, has significantly upgraded the office inventory in the Northwest sector.

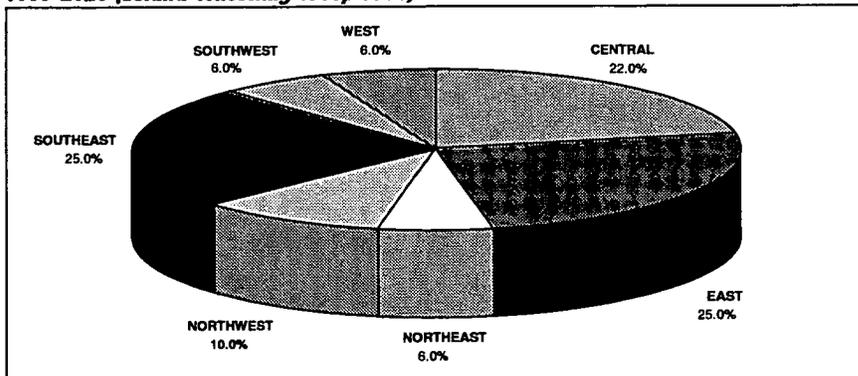
Future Development

Demand for new office space is derived from three principal sources: expansion of existing industry, relocation of new companies into the market, and creation of new firms. The Northwest sector's future share of Denver metropolitan area office growth will be enhanced by the following factors:

- the continuation of current regional office development patterns (increasing concentration along the U.S. Highway 36 Corridor)
- the opportunity for development of high-end, signature office space in key locations between Denver and Boulder
- the continued growth of the Northwest sector's traditional local-serving office base

As shown in Figure 2.1, the Northwest sector is expected to capture approximately 10% of office growth in the metropolitan area over the next 20 to 25 years. However, the Rocky Flats site, without significant improvements in access, will likely continue to be a secondary office location and therefore capture a limited share of the sector's office growth over this period.

Figure 2.1 Projected Office Development Capture/Percent Share of New Development, 1997-2020 (Leland Consulting Group 1998)



Industrial Development

Historical Development

- Historical industrial development absorption in the Denver metropolitan area has averaged 2.4 million square feet annually over the past eight years.
- Over the past eight years, the Northwest sector's share of historical industrial absorption was approximately 8.8%. The Northwest sector's overall share of existing industrial development is approximately 6%.
- The Northwest sector's industrial inventory has historically consisted of concentrations of manufacturing and office/warehouse space along the U.S. Highway 36 Corridor. Some areas of warehouse/distribution and light industrial development also exist along the I-70 West Corridor.

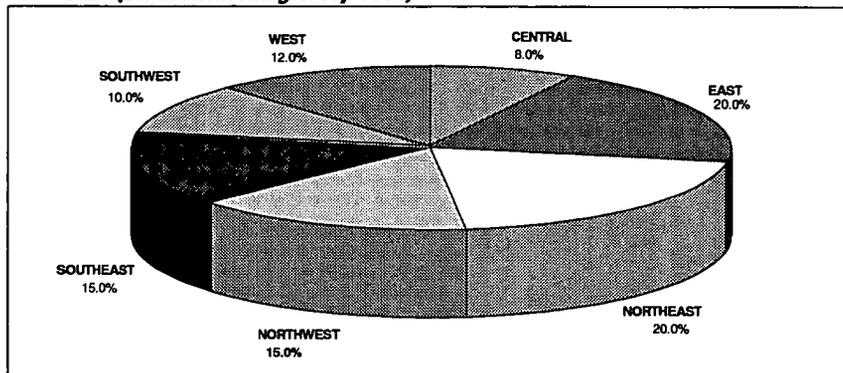
Future Development

Similar to office space, demand for new industrial space is also derived from the expansion of existing industry, relocation of new companies into the market, and creation of new firms. The Northwest sector's future share of Denver metropolitan area industrial growth will be enhanced by the following factors:

- the continuation of current regional industrial development patterns (increasing concentrations along the I-70 West and U.S. Highway 36 Corridors)
- the accelerated development of higher-end R&D space targeted to Boulder County's high tech industry base
- the continued growth of the Northwest sector's traditional industrial base

As shown in Figure 2.2, the Northwest sector is expected to capture approximately 15% of industrial growth in the metropolitan area over the next 20 to 25 years. The Rocky Flats site, with improvements in access, has the potential to capture a significant share of the sector's industrial growth over this period.

Figure 2.2 Projected Industrial Development Capture/Percent Share of New Development, 1997-2020 (Leland Consulting Group 1998)



Industry trends suggest a high level of demand in the future for "flex" space—a hybrid office/industrial product type which can accommodate a broader range of tenant types and activities than either traditional office or industrial space.

Given the general price sensitivity of industrial users, the Rocky Flats site, and the area surrounding it, could emerge as a lower-cost location for tenants seeking proximity to the U.S. Highway 36 Corridor.

Business Location Profile

To gauge Rocky Flats' competitive position for future development growth within the Denver metropolitan area, comparisons between the Northwest sector and other existing and proposed concentrations of office/industrial space were made. The development centers and the criteria used for comparison are listed below.

Office/Industrial Concentration
• U.S. Highway 36 Corridor/Rocky Flats
• Lowry/Stapleton/Fitzsimmons
• E-470 Corridor
• Boulder (CU)
• I-25 South Corridor
• I-70 West Corridor
• I-70 East Corridor

Site Location Criteria
• Labor force characteristics
• Access to business support services
• Transportation availability
• Utility costs/availability
• Land/building costs/availability
• Local business climate
• Financial resources
• Quality of life

The following comments summarize the strengths and weaknesses of the Rocky Flats area as compared to these other prominent office/industrial concentrations.

- Current positive business location variables that affect the Rocky Flats site include those associated with the Northwest sector, i.e., a highly-skilled available labor force, relatively low-cost utilities, and a high quality of life. A positive location variable that could affect Rocky Flats in the future is its proximity to the U.S. Highway 36 corridor (and potential linkage via the "Northwest Parkway").
- Current business location variables that affect the Rocky Flats site negatively include relatively poor transportation linkages and access, lack of major users and destination-oriented development, negative perception of historic land use, and the uncertainty about future availability of development sites. Other variables that could affect the Rocky Flats site negatively in the future include the negative perception of historic land use, and the potential lack of development identity if major users and/or destination development does not occur nearby.
- In addition to an analysis of Rocky Flats' (and the Northwest sector's) competitive position relative to general business location variables, an evaluation of competitive position by facility type was also conducted. Based on this analysis, the office and/or industrial facility types most likely to locate at Rocky Flats are research and development and high tech companies.
- Experience has demonstrated that success of long-term economic development alliances between former defense facilities and the local community depends on prevailing market and economic conditions, broad-based support and cooperation from key public and private stakeholders, and a balanced perspective on the facility's historical activities.

ENVIRONMENT

This section summarizes the existing environmental conditions and the environmental conditions that may exist after cleanup of the Rocky Flats. It also includes an evaluation of the constraints that may be imposed by post-closure environmental conditions on the future development of the Industrial Area.

Existing Environmental Conditions. Rocky Flats' 6,065 acre, mostly undeveloped Buffer Zone contributes greatly to the extensive regional open space system in the northwest sector of the metro Denver area. Jefferson County, Boulder County, and City of Boulder Open Space Departments, the State Land Board, other municipal parks and open space departments, and Denver Water manage lands in the regional open space system.

The region has a semi-arid climate characteristic of much of the southern Rocky Mountain region. The predominant wind direction is from the northwest and the site is noted for its high wind gusts.

Rocky Flats is located on a flat bench at an elevation of about 6,000 feet. The most widespread geologic deposit on the site is Rocky Flats Alluvium, which is the main source of sand and gravel mined on the site. The TXI company operates an aggregate quarry in the northwest corner of the site. It has received permits to expand along the site's western edge as well as southwest of the site.

The site is permitted by the Colorado Department of Public Health and Environment to release a variety of radiological and hazardous air pollutants. Concentrations of all air pollutants on- and off-site have been and are expected to remain below applicable standards.

Plutonium and americium in soils exist at several locations at the site. The most significant source in soils is on the eastern side of the Industrial Area, called the 903 Pad. In the vicinity of the 903 Pad, plutonium and americium concentrations in soils exceed 1,000 pCi/g. Additional soil characterization will be conducted after building decommissioning and demolition to determine whether soil remediation is warranted under buildings.

Environmental Conditions

- The federal government does not own most sub-surface mineral rights.
- The Energy Department hopes to start shipping plutonium off-site in 2002. Commercial use of the Industrial Area will be severely restricted as long as plutonium remains on-site.
- Cleanup of the Protected Area may result in some or all of the area being capped and future access restricted.
- The Cleanup Agreement requires that surface and ground water leaving site be acceptable for all uses. Future site restrictions will include prohibition on use of site ground water for drinking water.
- Habitat for Preble's meadow jumping mouse (a species that has been listed by the federal government as threatened) is found in the Buffer Zone but is unlikely to affect development of the Industrial Area.
- Xeric tallgrass prairie found at Rocky Flats is very rare in Colorado and one of the largest remaining stands in North America. It could restrict development west of the Industrial Area.
- Significant wetlands and riparian areas exist in the Buffer Area, but wetlands in the Industrial Area are unlikely to affect future development.
- Rocky Flats Historic District status requires only photo documentation and is unlikely to affect future development of the Industrial Area.
- Constraints to use of Industrial Area during cleanup include safety and security concerns related to plutonium and cleanup activities.

Three different water-bearing zones are found at the site—the upper alluvial zone, the lower aquitard, and the Laramie-Fox Hills Aquifer. In some locations, the upper water-bearing zone is not sufficiently saturated to sustain a well and dries up during the year. Underlying the upper water-bearing zone is an aquitard (a water-bearing zone with restrictive water movement). Water in the aquitard moves very slowly due to the clayey content of the bedrock. The regional Laramie-Fox Hills Aquifer is present 600 or more feet below the aquitard. In some locations, particularly beneath the Industrial Area, the shallow water-bearing zone beneath the site is contaminated with radionuclides such as plutonium and americium, volatile organic compounds such as trichloroethene, and metals. The aquitard is less contaminated than the shallow aquifer. Studies have indicated that the Laramie-Fox Hills Aquifer is unlikely to be affected by contaminants released from the site.

Three intermittent streams drain the site, two of which drain the Industrial Area (Walnut Creek and Woman Creek). The current status is that stream flow in these watersheds passes into a series of engineered detention ponds. The detention ponds are used to settle out suspended sediments and other contaminants. Standley Lake, a water supply reservoir about ½ mile east of the site, no longer receives Woman Creek flows. Great Western Reservoir is no longer used for drinking water storage. Rock Creek flows northeast into Boulder Creek. There are also several private ditches that flow through the site. No stream flow off of the site is used for domestic water supply.

The primary vegetation types on-site are xeric tallgrass prairie, mesic mixed grasslands, tall upland shrub, wetlands, and riparian woodlands. Much of the habitat along drainages is supported by perennial seeps distributed throughout the site. The Colorado Natural Heritage Program believes the site's xeric tallgrass prairie is the largest example of xeric tallgrass prairie remaining in Colorado, or perhaps North America. The Colorado Natural Heritage Program identified four areas at or near Rocky Flats as significant conservation sites.

The U.S. Fish and Wildlife Service has listed the Preble's meadow jumping mouse as a threatened species. It is found in streamside riparian habitat along the principal drainages throughout the property.

The Colorado State Historic Preservation Officer has determined that 64 buildings within the Industrial Area are significant historically because of their role in the Cold War Era. These buildings comprise the Rocky Flats Historic District, a Historic District under the National Register of Historic Places. This designation requires photo and other documentation, but does not mandate building preservation.

Following is a summary of key findings and conclusions:

1. The Federal government does not own the right to subsurface minerals anywhere in the Industrial Area. Development of the Industrial Area is potentially restricted in areas where private parties own mineral rights. Permitted mining in the buffer zone between the Industrial

Rocky Flats Cleanup Agreement

- The Rocky Flats Cleanup Agreement, signed in 1996 by the Dept. of Energy, EPA and the Colorado Department of Public Health and Environment, regulates the cleanup of the site.
- The primary risk from the site is the presence of plutonium and other nuclear materials in various forms inside buildings.
- Safe containment, stabilization and disposal of these wastes and materials is the highest priority for the cleanup.
- Most areas of the Buffer Zone already meet criteria for unrestricted use. However, soil remediation will be done in areas east of the Industrial Area and at hot spots in and adjacent to the Industrial Area.
- The cleanup plan calls for decontamination, demolition and removal of all contaminated buildings and demolition of any clean buildings not requested by the community for reuse.
- Some access-restricted soil covers (i.e., caps) may be used where adequate removal is not feasible.

Area and Highway 93 will restrict use and development of that area over the next 20 to 30 years.

2. DOE currently plans to ship plutonium metals and oxides off-site to DOE's Savannah River facility for final disposition beginning in 2002. If the shipment plan is not approved, plutonium will be stored in Building 371 or a new interim storage vault at the site until the material is shipped off-site to a yet-to-be identified repository. DOE will make a decision in 1998 on whether to build an on-site plutonium vault. Use of the Industrial Area will be significantly restricted as long as plutonium is stored on-site. Other radioactive and hazardous waste is proposed for disposal off-site, but not all of these wastes have approved receiver sites.
3. Cleanup of the Protected Area may result in some or all of the area being capped. The capped area will require fencing and institutional controls to ensure integrity of the caps for an extremely long time. It is likely public access to the capped area will be prohibited, restricting future site development of all capped areas. Caps are most likely to be used in the Protected Area and two former landfills.
4. The Rocky Flats Cleanup Agreement (RFCA) requires that when cleanup activities are completed, all on-site surface water and all surface and ground water leaving the site will be of acceptable quality for all uses, including domestic water supply. The upper water-bearing zone at the site is poorly suited as a water supply source. Future site restrictions will include a prohibition on use of the site's ground water for drinking water.
5. The Preble's meadow jumping mouse is unlikely to affect future development of the Industrial Area. The proximity of the Industrial Area to suitable mouse habitat provides an opportunity for environmental education.
6. The xeric tallgrass prairie found at Rocky Flats is very rare in Colorado and is one of the largest remaining in the state and perhaps in North America. It occurs just west of the Industrial Area as well as the Buffer Zone.
7. The only wetland in the Industrial Area is a small riparian area east of Building 371. Its presence is unlikely to affect future development of the Industrial Area.
8. If all the buildings that are primary and secondary contributors to the Rocky Flats Historic District are removed, the District will no longer exist. If some buildings are retained, the Colorado State Historic Preservation Officer will reevaluate whether sufficient resources exist to maintain an Historic District. No restrictions on demolition of or interior or exterior modifications to buildings that are primary or secondary contributors to the Historic District will remain after suitable documentation has been developed for the National Archives.
9. Constraints to commercial use of the site during cleanup include security and safety concerns because of the proximity to plutonium and the use of the Buffer Zone boundary to determine air emission compliance.

INFRASTRUCTURE

This section presents a summary of the existing infrastructure systems serving the Industrial Area of Rocky Flats.

These systems include potable water, sanitary sewer, natural gas, and roads. Other infrastructure systems evaluated to a lesser extent include Steam Generation and Distribution, Solid Waste Collection and Disposal, Fire Protection and Hazardous Materials, Security, Telecommunications and Rail Service.

Major findings and conclusions of the infrastructure evaluation include:

- The infrastructure systems in place at the facility have been constructed over the life of the facility, primarily in the 1950s through the 1980s. There has been very little recent construction and or upgrades to any of the systems. Current DOE policy is to "operate systems to failure."
- Transportation to the site is via state highways and county roads. Redevelopment in the Industrial Area can be served by the existing regional transportation network at current levels of service. Construction of additional regional transportation improvements, such as the "Northwest Parkway," would enhance access to the site and the surrounding area.
- The on-site road system is in fair condition. If retained, it could serve existing buildings provided that improvements are made to create a looped system within the developed area. However, on-site roads do not meet current Jefferson County standards. If the on-site road system is demolished during cleanup then a new road system would be required to serve existing and future buildings. This could follow the current alignments of existing roads and could be constructed to current standards.
- Currently, the City and County of Denver Board of Water Commissioners provides Rocky Flats with raw water through a contract with the Department of Energy (formerly the Atomic Energy Commission). After cleanup and possibly in the interim, it is possible that water service could be contracted with the City of Arvada, which has plans to serve the area to the south and west and has mains to the southeast at approximately SH-72 and Indiana Street. This would require the construction of a main along SH-93 and modification/replacement of an existing water main between SH-93 and the Industrial Area. This alignment is necessary due to topography. In addition, a court settlement requires DOE to provide 20,000 gallons of potable water per day to serve private development at the SH-93 entrance.
- Currently, raw water is treated on-site and is stored in elevated and at-grade storage tanks. To serve future on-site development, retention of the treatment plant (built in the early 1950's) is not feasible but retention and use of the elevated storage tank is possible. On-site distribution of potable water and provision of fire protection for buildings to be retained can utilize the existing trunk system, with modifications to isolate the Protected Area (i.e., the plutonium zone) from

Infrastructure Overview

1. Primary infrastructure at Rocky Flats includes:
 - Potable Water
 - Sanitary Sewer
 - Natural Gas
 - Electrical Power
 - Roads
2. Other systems include
 - Steam
 - Solid Waste
 - Fire Protection/Hazardous Materials
 - Security
 - Telecommunications
 - Rail Service
3. Current condition of systems is fair.
4. DOE plans to operate current systems to failure and abandon in place portions of uncontaminated subsurface systems.
5. Cost of new water/sewer to reach site and rehabilitation of on-site infrastructure could cost \$3-5 million.
6. Cleanup process on-site might be coordinated with new water/sewer to reach site and benefit future development of site.

other areas and to create a looped system. If the on-site distribution system is demolished, a new system will need to be constructed. Kaiser Hill is currently studying potable water supply options for the interim cleanup period.

- There is an on-site wastewater treatment plant east of the Protected Area that currently serves Rocky Flats and releases treated effluent into the Walnut Creek drainage. This effluent is detained in special ponds and eventually discharged into the Great Western Reservoir, which is no longer used for drinking water storage. The existing wastewater treatment facility is planned to be demolished during cleanup, which may leave the site without treatment facilities during the interim period. One of the options being studied by Kaiser-Hill is to utilize portable septic systems on-site after demolition of the existing systems.
- Kaiser Hill is currently studying wastewater treatment options for the interim cleanup period, which includes contracting for service with the City of Arvada. This would require extension of a main to SH-93 where it could tie into a main extending to the existing main at SH-72. Modifications to the existing on-site collection system would also be required, including a combination of gravity mains and lift stations. If the existing on-site collection system is demolished, then a new system would need to be constructed to serve redevelopment.
- Jefferson Center Municipal District is currently planning the alignment for an extension of a 15-inch sanitary sewer main from Alkire to SH-93 (preliminary design is already complete). The next construction phase will be from Alkire to Indiana.
- The timing of improvements beyond those mentioned above is subject to development demands in the area. However, the projected needs of the Jefferson Center (tied to market demand), integrated with the potential demands of RFETS would tend to indicate that extension of the portions of the sanitary sewer collection system proposed in this area is feasible.
- Electricity to the site is provided by the Public Service Company of Colorado, some of it under WAPA allocations. Facilities include two high voltage transmission line feeds to the Industrial Area and approximately four electrical substations. With minor modifications, a substation can be retained in the western portion of the Industrial Area to serve existing and future development. On-site electrical distribution could be retained to serve selected buildings. If the on-site electrical distribution system is demolished a new system would need to be constructed to serve redevelopment.
- Natural gas is provided to the site under special Department of Defense contracts, which would need to be replaced by conventional service agreements when redevelopment of the site occurs. The existing delivery and distribution systems appear to be adequate to serve on-site development. However, if these facilities are removed during cleanup, they would need to be replaced with new facilities to serve redevelopment.
- The existing central steam plant and above ground distribution system for building heating on the site are in poor condition and are to be abandoned as the buildings are either vacated or demolished as part of the cleanup process. As necessary during the interim period, heating in individual buildings will be provided by individual boilers.
- Solid waste service to the site is currently provided by private contractor and sanitary waste is disposed of off-site. A similar arrangement could be established for redevelopment in the Industrial Area. One cell of a four cell phase solid waste landfill has been constructed northwest of the Industrial Area in the Buffer Zone. However, this facility is not now planned to be used. Additional permits (or amendments to permits) and maintenance would be required to convert this facility to non-DOE use. If the facility remains unused for a period of time, the integrity of the liner system would have to be evaluated prior to initiating use.

- Fire protection and hazardous material response is provided by a crew and on-site fire station operated by the site's contractor. The high level of service reflects the materials and activities presently on-site. A new arrangement (possibly adding the area into an adjoining fire district or a cooperative arrangement) would be necessary to provide future fire protection for redevelopment on the site, after cleanup.
- Security for the site is provided by a private contractor and is related to nuclear facility requirements and the presence of plutonium on the site. These requirements will change once plutonium has been removed. Security services for the site after cleanup could be provided by private contract or by an arrangement with a neighboring jurisdiction, such as the Jefferson County Sheriff.

EXISTING BUILDINGS

This section summarizes the assessment of selected buildings identified for potential retention in the Rocky Flats Industrial Area.

It provides information about the rehabilitation measures necessary to bring these facilities into compliance with building, life safety, and accessibility codes and standards as well as preliminary budget figures for rehabilitation work and maintenance costs.

The following are the key findings.

Assessment Summary and Conclusions

Table 2.1 summarizes the basic features and sizes of the buildings that were evaluated.

Building Reuse	
•	Seven buildings were considered for reuse (totaling 411,000 square feet): Buildings 125, 130/130W, 131, 440,460 and 850.
•	Two other buildings were set aside for the National Conversion Pilot Project, cancelled by DOE in 1998.
•	Buildings are currently in fair to good condition.
•	Kaiser-Hill currently projects buildings to be become surplus between 2003-2009.
•	Maintenance costs of existing buildings (based on private sector) would be \$2-4/square foot per year.
•	Some buildings could be marketable if offered at low cost, but none are attractive for major long-term anchor tenants.
•	Future environmental technology users likely to want "build-to-suit" facilities rather than refurbished buildings.
•	The Task Force investigated the symbolism and marketing potential of leaving some buildings standing.
•	Conducting site cleanup around existing buildings is complicated, expensive and requires "buy-in" by Kaiser-Hill.

Table 2.1 Building Summary

Description	Building 125	Building 130	Building 130w	Building 131	Building 440	Building 460	Building 850
Type/Stories	Metal frame Single story	Metal frame 2 stories	Metal frame 2 stories	Metal frame Single story	Metal frame Single story w/high center bay	Metal frame w/high bay 2 stories	Metal frame Multiple story
Square Footage)	12,900	50,000	30,000	22,000	43,320	212,980	39,894
Past Use	Metrology Laboratory	Admin.	Cafeteria, Shipping and Warehse.	Office	Vehicle Modification Facility	Non-Nuclear Manuf. Facility	Logistics Office, Cafeteria
Current Use	Same	Same	Same	DOE Office/ Warehouse	Storage of RCRA waste	RFETS/DOE Admin.	Admin. (cafeteria closed)

Reuse Flexibility

While initially designed for a specific purpose, some buildings are more likely to become functionally obsolete than others. Because of lack of flexibility in their design and construction, their potential for reuse is diminished. Table 2.2 summarizes the relative value of each building for retention based upon future flexibility in the building design.

Table 2.2 Reuse Flexibility by Building

Description	Building 125	Building 130	Building 130W	Building 131	Building 440	Building 460	Building 850
Functional Flexibility	low	high	high	high	low	high	medium
Comments	unique - laboratory	office - flexible layout	warehouse flexible layout	office-flexible layout	unique-workshop	office/warehouse flexible layout	office-less flexible layout

Schedule for Availability

The date at which buildings are available for reuse is based upon the current deactivation and decommissioning schedule of DOE. Table 2.3 indicates these dates for each building, based upon the current revised 2010 Cleanup Plan. For this analysis, it is important to note that the date used by DOE for decommissioning assumes that the community could reuse the building immediately upon decommissioning. Current DOE policy is that the community would become responsible for requested buildings when they are deactivated and decommissioned. However, if plutonium is still present on the site at the time that the buildings were ready, the buildings could not be available to the community.

If the buildings were to be retained for future use, then the assignment of costs to the appropriate entities is key. Although maintenance and other costs during the deactivation and decommissioning process would be borne by DOE, costs after this are projected by DOE to be the responsibility of the community. Therefore, if the community is planning on reusing the buildings after they are made available by DOE, it is imperative that the community finds tenants as soon as possible in order to defray maintenance and other holding costs.

Table 2.3 Building Deactivation and Decontamination Schedule

Activity	Building 125	Building 130	Building 130w	Building 131	Building 440	Building 460	Building 850
Deactivation Complete	2004	2003	2003	2003	2009	2005	2006
Decommissioning Complete	2004	2003	2003	2003	2009	2006	2006

Note: All dates are assumed to be September 30 of the year indicated.

Maintenance Costs

Table 2.4 summarizes anticipated annual costs for maintenance on a building-by-building basis. Both minimal maintenance and normal maintenance costs are presented for comparison.

“Minimal” maintenance is defined as that which is required to keep the building structure in a minimal serviceable condition without a tenant (i.e., the building is locked and not heated). Minimal maintenance assumes that the building would be in a “mothball” condition – that is, it would be disconnected from utilities and otherwise made unserviceable for a tenant until it was reactivated and reconnected to utilities.

“Normal” maintenance is appropriate if the buildings are not mothballed and can be reoccupied quickly (i.e. within two years) after being turned over to the community. Based upon comparable costs from the private sector, normal maintenance ranges in cost from \$4 to \$6 per square foot (and includes utilities, taxes, insurance and custodial service). One can extrapolate the cumulative maintenance costs (whether it be minimal or normal maintenance) based upon the

information provided in the table, factoring in the number of years that the community provides maintenance.

Table 2.4 Maintenance Costs

Description	Building 125	Building 130	Building 130w	Building 131	Building 440	Building 460	Building 850	Total
Square Footage (SF)	12,900	50,000	30,000	22,000	43,320	212,980	39,894	411,094
Minimal Maintenance (Annual \$/000)	16	60	48	47	23	110	53	357
(\$/SF)	1.24	1.20	1.60	2.14	0.53	0.52	1.33	
Normal Maintenance (Annual \$/000)	52	200	120	88	173	851	160	1,644
(\$/SF)	4.00	4.00	4.00	4.00	4.00	4.00	4.00	

Upgrade Costs

The condition and future usability of the buildings is directly related to their age and, less so, their function and current structural configuration. Although the current condition of the buildings ranges from fair to good, reuse and upgrade costs for the buildings would be considerable, especially considering what will be required in terms of code improvements, physical plant and site improvements to make them minimally suitable for commercial use.

Table 2.5 displays information about one-time upgrade costs for each building to meet commercial building codes. All costs are given in thousands of first quarter 1998 dollars. Upgrade costs are distinct from tenant improvement costs.

The costs for interior and exterior upgrades to make the buildings serviceable for reuse (not including tenant finish) total \$4.7 million (ranging from \$8 to \$18 per square foot). These costs would likely be borne, at least initially, by a master developer or facility manager (i.e. the community reuse organization) and then amortized through the lease. Furthermore, it would be prudent that these improvements be undertaken only after a tenant is identified and a lease negotiated that can recover the costs. This would also facilitate coordination of tenant improvements (which are also amortized through the lease) with the upgrades.

Building Reactivation Costs

Potential costs for reactivating a building after it has been "mothballed" are not included in the upgrade costs discussed above. "Mothballing" is the process whereby a building is disconnected from utilities and otherwise made unserviceable for a tenant so that it can be retained at a low cost for an extended period of time. The reactivation process is necessary to make it once again serviceable for a tenant. Reactivation costs, if they were necessary, could exceed potential maintenance savings if the holding period is a short one. If the building is retained for a longer period of time, the reactivation costs can be justified because of the lower interim maintenance costs.

Table 2.5 Costs for Upgrades by Building

Description	Bldg. 125	Bldg. 130	Bldg. 130W	Bldg. 131	Bldg. 440	Bldg 460	Bldg. 850	Total
Year Built	1965	1985	1985	1986	1971	1985	1984	
Square Footage	12,900	50,000	30,000	22,000	34,320	212,980	39,894	411,094
Environmental Remediation	142	0	0	0	378	160	0	680
Upgrades/ Conversions								
• Code/ADA Compliance	68	40	147	14	182	143	27	
• Architectural	70	330	57	119	186	429	215	
• Structural	0	0	0	0	0	0	0	
• Site	50	236	107	84	133	370	154	
• HVAC	23	154	70	23	61	373	70	
• Electrical	7	31	14	11	18	66	21	
• Information System	7	31	14	11	18	66	21	
Subtotal	225	822	409	260	598	4,457	508	
• 10% Contingency	23	82	41	26	60	146	51	
Total Upgrades/ Conversions	248	904	450	286	658	1,603	559	4,708

Note: * Applies only to Buildings 125, 440, and 460. Cost varies significantly among buildings.

3. Planning Concepts

OVERVIEW

The Task Force formulated a number of planning concepts for the Industrial Area which were fundamental in developing reuse alternatives for the Industrial Area as well as the strategies to implement them. These concepts dealt both with the region surrounding Rocky Flats as well as the Industrial Area and the area immediately adjoining it. They reflected concerns relative to regional open space, transportation, growth patterns and employment centers, defining the development study area, and phasing of the site reuse. The concepts drew heavily on the Task Force's mission, goals and objectives, and assumptions, as well as the findings of the technical and planning consultants.

REGIONAL CONTEXT

Transportation - The future use of the Rocky Flats Industrial Area should both anticipate and influence plans for future regional transportation improvements in the area.

- In the area around Rocky Flats, existing roads have accommodated the historical use of Rocky Flats for approximately 8,000 employees, accessing from the west by way of SH-93 and from the east by way of Indiana. Rail has provided alternative transport to Rocky Flats for heavy materials and cargo.
- Mobility within the northwest metropolitan area is a major concern, especially in the area bounded by Interstate 25, Interstate 70, the Boulder Turnpike and SH-93. While the "Northwest Parkway" is not part of the Jefferson County Transportation Plan, the need for improved safety, access and mobility in the northwest quadrant is acknowledged by the impacted jurisdictions and there is a desire to address this problem in the future. Broomfield is currently studying how to link I-25 and SH-128 and the Denver Regional Council of Governments and Jefferson County are planning to study north-south transportation in the northwest quadrant.

Growth Patterns - Planning concepts for the Rocky Flats Industrial Area should consider the impact of future site use relative to the anticipated growth patterns of the surrounding cities.

- Rocky Flats has historically been considered to be outside the jurisdiction of surrounding municipalities because it is a federal facility. Broomfield and Westminster have adopted growth boundaries which do not include Rocky Flats and which direct their growth to the east. Arvada, however, has made plans to grow to the west to include the area of the Jefferson Center Metropolitan District within its future service/annexation boundaries. The Town of Superior borders Rocky Flats to the north and has gradually annexed land with the intention of maintaining a balance of residential and employment/tax base.

Employment Centers - Planning concepts for the Rocky Flats Industrial Area should consider its potential role as an employment center and how this relates to existing and planned employment centers with the northwest metropolitan area.

- There are a number of important regional employment centers in the northwest metropolitan area that could have an impact on what may happen in the future at Rocky Flats. The Interlocken business park, located on US-36 in Broomfield, is an employment center of regional importance. Westminster is planning for increased employment land use within its growth boundaries, in addition to continued commercial development in the City Center also located on

US-36. The Town of Superior is developing a major employment and commercial center to the north along the US-36 corridor near McCaslin Boulevard.

- Future development of the Jefferson Center is a key strategy for developing employment-related land use in the City of Arvada. Therefore, from a regional perspective, the potential role of Rocky Flats as an employment center is a fundamental question to be addressed.

Open Space - The future use of the Rocky Flats Site should help to reinforce the established regional framework of open space.

- Open space in the northwest metropolitan area is a very important element of the urban fabric and regional context, and can: (1) constrain urban sprawl, (2) provide for public recreation/enjoyment, (3) provide wildlife habitat, (4) preserve exceptional ecological resources, and (5) provide opportunity for research and education. Development of a comprehensive and connected regional open space system in this area continues to be a priority of all of the surrounding jurisdictions.
- The Rocky Flats site, and especially the Buffer Zone, should be considered as a major asset within the regional framework of open space. Existing open space in the northwest metropolitan area is likely to be augmented by future acquisitions through such programs as Jefferson County Open Space and Boulder City and County Open Space as well as the open space and parks programs of neighboring municipalities and the Five-County Mountain Backdrop Project.
- Many ecological features of the site, such as streams and plant and wildlife habitat, extend beyond the boundaries of Rocky Flats.

PLANNING AREAS

- The analysis of the Industrial Area and western Buffer Zone led to important conclusions about physical characteristics and conditions that may influence the future uses and phasing of uses or development in the Industrial Area. After an overall development study area was defined, it was subdivided into ten different Planning Areas, which reflected the following physical factors: (1) existing uses and facilities, (2) other existing physical conditions (man-made and natural) and (3) known levels of contamination and phasing of the Cleanup Plan.
- Table 3.1 provides a brief description of the Planning Areas, which are also illustrated on the attached map (Figure 3.1). Note that comments relative to contamination and cleanup of the site are subject to revision, based upon annual updates to the Cleanup Plan by DOE and Kaiser-Hill, the site contractor.

REUSE PHASING

In the event the Industrial Area is utilized for a development, open space or a combination of development and open space uses after cleanup, there are a number of factors that would influence the phasing of the reuse of the site:

- Planned sequence of cleanup that conceivably could free up western portions of the Industrial Area prior to cleanup of the remainder of the entire site.
- Actions by the City of Arvada and the Jefferson Center Metro District to extend new water lines and sewer lines from SH-72 to the north along SH-93.
- Condition and availability of existing waterlines and access roads that extend into the Industrial Area from the west (SH-93). (The western access may be used for transport of radioactive waste.)

- Location of the more usable buildings (130, 130W, 131 and 460) in the western portion of the Industrial Area (Planning Areas 1B and 2).
- The presence of surface mining for the next 20 to 30 years along the western boundary of the Rocky Flats may affect the attractiveness of the site for development. Reclamation of mined areas must be done in concert with reuse plans for the Buffer Zone and the Industrial Area.

Based upon these and other factors, it appears reasonable that reuse of the site could begin from the west and proceed to the east. Ideally, once areas are cleaned up to the standard acceptable to the community, they could be released in a phased manner to allow reuse to begin at an earlier date and be spread over a period of years. This approach could also allow for selected buildings to be released in a phased manner to the community. Of course, such an approach would have to be incorporated into the Cleanup Plan for the site and coordinated with Kaiser-Hill, the site cleanup contractor. This strategy works for future uses of redevelopment, as well as open space or land reserve.

Figure 3.1 Map of Planning Areas

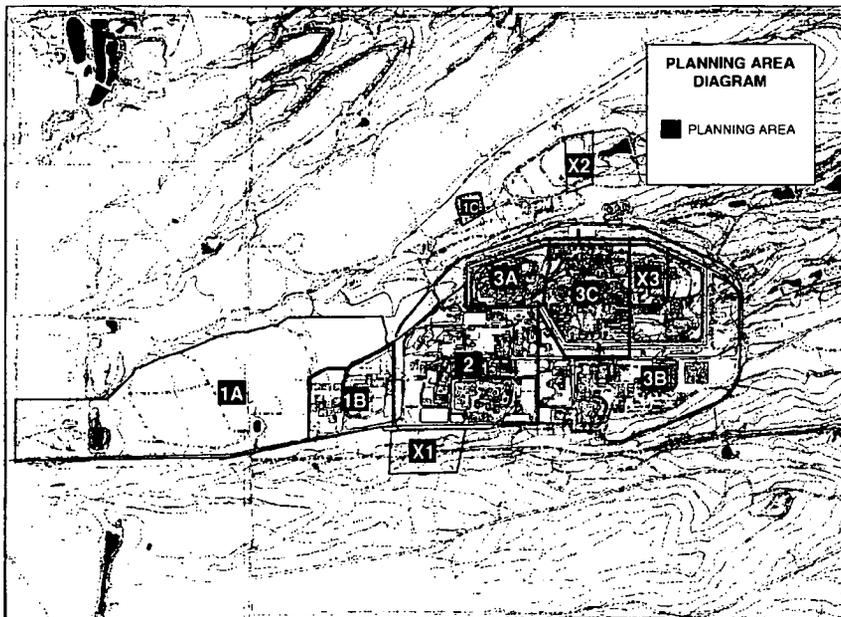


Table 3.1 Description of Planning Areas

Planning Area	Description/Features	Comments
1A Western Access Road Corridor	<ul style="list-style-type: none"> • Xeric tallgrass prairie • Permitted mining areas • Buffer to private development off-site 	<ul style="list-style-type: none"> • Xeric tallgrass prairie has a high ecological value. • This Buffer Zone area is part of the same natural mesa on which the Rocky Flats Industrial Area is situated. • Serves as a natural buffer between the Rocky Flats Industrial Area and development along SH-93. • Southern boundary of this area is defined by the western entrance road to the site. • Mining is currently underway.
1B Western Area	<ul style="list-style-type: none"> • Includes Bldg 130/131 Complex and temporary trailers • Planview Substation provides 115kv to the site. 	<ul style="list-style-type: none"> • Area could be isolated from the remaining plant area to the east. • Part of the same natural mesa on which the Rocky Flats Industrial Area is situated.
1C New Solid Waste Landfill	<ul style="list-style-type: none"> • State-of-the-art landfill with compaction station 	<ul style="list-style-type: none"> • Facility could be retained for use by community or in conjunction with on-site activities
2 West/Central Area	<ul style="list-style-type: none"> • Includes 100, 200, 300, 400, 500 and 600 series buildings 	<ul style="list-style-type: none"> • Area was used for non-nuclear activities and has less contamination than 3A, #B and 3C. • Area is an integral part of the Plant area but not part of the Protected Area where plutonium was used.
3A Northwest Protected Area	<ul style="list-style-type: none"> • Includes Bldg 371 Complex • Includes a small drainage area/wetlands that flows into Walnut Creek. 	<ul style="list-style-type: none"> • Area was used for nuclear activities and will require extensive cleanup, now scheduled at the end of the project. • Caps may be required, although Bldg 371 is newer and in better condition than the buildings in the 700 area.
3B East and Central Area	<ul style="list-style-type: none"> • Includes 800 and 900 series buildings • Area of significant contamination. 	<ul style="list-style-type: none"> • Area was used for nuclear activities and will require extensive cleanup. • 903 Pad will be a major soil remediation project.
3C North/Central Protected Area	<ul style="list-style-type: none"> • Area of significant contamination within the Protected Area. • Includes 700 series buildings • North Switchyard substation (located to north) provides 1125 kv feed from two sources 	<ul style="list-style-type: none"> • Area was used for nuclear activities and will require extensive cleanup. • Caps may be required, especially for building footprints.
X1 Old landfill	<ul style="list-style-type: none"> • Not currently in use. 	<ul style="list-style-type: none"> • Separated from the Industrial Area by the south access road. • Cap likely to be required (according to 1997 Cleanup Plan).
X2 Current Landfill	<ul style="list-style-type: none"> • More recently used, but not currently in use. 	<ul style="list-style-type: none"> • Cap likely to be required (according to 1997 Cleanup Plan).
X3 Solar Ponds	<ul style="list-style-type: none"> • Area of significant contamination within the Protected Area. 	<ul style="list-style-type: none"> • Cap likely to be required (according to 1997 Cleanup Plan).

PLANNING ASSUMPTIONS

There are many uncertainties associated with the timing of cleanup and other aspects of Rocky Flats. The following are the key assumptions made by the Task Force in developing scenarios and implementation strategies.

1. The Industrial Area risks will be reduced to make it suitable for use as an employment center. The portions of the Buffer Zone that are contaminated will be cleaned to a standard that will allow for open spaces uses.
2. The site will not be redeveloped for residential or retail use other than retail that is necessary to support on-site activities.
3. Under all reuse options for the site, the community will push for stringent cleanup standards.
4. Cleanup will occur according to the Rocky Flats Cleanup Agreement (RFCA). This means that it may be completed as early as 2010. Cleanup could take as long as 2015, depending upon actual funding levels and the availability of receiver sites for plutonium and waste. Reuse activities must be coordinated with and not conflict with cleanup activities.
5. In future annual reviews of RFCA, the standards for cleanup may be changed. Changes to interim soil cleanup levels may be recommended by the Soil Action Level Oversight Panel.
6. RFCA (or another mechanism) will be modified in the future to specify DOE stewardship responsibilities, including meeting all ongoing legal responsibilities, assuring reliability of monitors and institutional controls and being responsible for any contamination resulting from DOE activities at the site, regardless of future ownership. This may mean that the federal government retains ownership of some or all of the Industrial Area and Buffer Zone, although long-term leases of property to appropriate entities would be possible.
7. Surface mining of gravel will continue in the western portion of the Buffer Zone in accordance with State and County permits.
8. Although RFCA calls for capping several areas in and around the Industrial Area, whether caps are needed and how they may be designed, has not yet been determined and will depend upon further investigation.
9. The current plan is to remove all on-site plutonium by 2004. However, it may remain on the site until 2015, stored in Building 371 or a new vault. Reuse is not envisioned while plutonium is stored on the site.
10. It is unlikely that reuse of the Industrial Area can occur before cleanup is complete. However, if DOE policy changes, reuse could be phased from the west in a manner that does not conflict with site cleanup.
11. Removing uncontaminated underground infrastructure, foundations and storage tanks and otherwise preparing the site for future redevelopment are not included in the cleanup agreement. Nonetheless, these actions are important in preparing the Industrial Area for reuse.

4. Options for Future Use

OVERVIEW

The Task Force developed six reuse scenarios for the Rocky Flats Industrial Area, but recognized that specific decisions about reuse can only be made several years into the future when more is known about the disposition of plutonium and the nature, extent, and timing of cleanup and waste removal. The scenarios were developed to illustrate the types of uses the Task Force believes should be reserved as future choices. They are not recommendations per se, although each has champions on the Task Force and in the community. They serve, instead, to define a range of choices that future residents and decision-makers should have preserved.

These reuse scenarios were developed based upon data collected and analyzed by the Task Force and the consulting team. Issues and information sources that were analyzed included:

- Physical conditions of buildings and infrastructure
- Recommendations of the Future Site Use Working Group
- Environmental conditions (both current and post-cleanup)
- Surrounding land uses (existing and projected)
- Economic market analysis and case study analysis of other sites and facilities
- Task Force mission, goals and objectives
- Community input

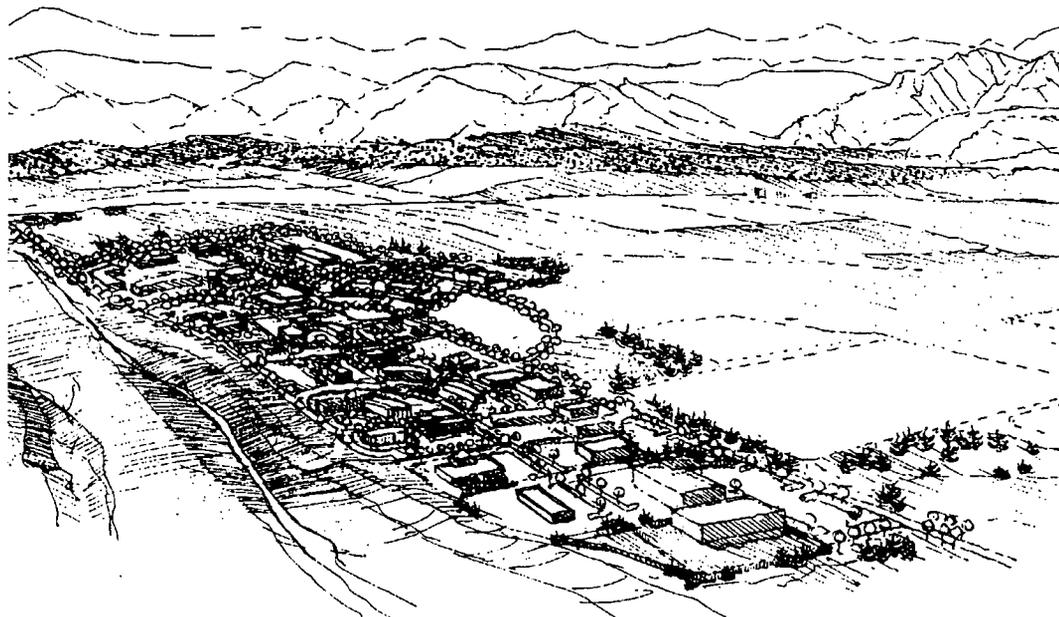
The future use scenarios developed by the Task Force incorporate a broad spectrum of options for future use of the site. Each scenario should be considered on its own merits and in terms of how portions of it might be incorporated with other scenarios to develop a single preferred plan. The scenarios are the following:

- Scenario 1: Industrial Redevelopment
- Scenario 2: Eco-Industrial Park
- Scenario 3: University/Federal Laboratory R&D Center
- Scenario 4: Future Single Tenant, "Jewel" Use
- Scenario 5: Cold War Museum and Archives
- Scenario 6: Open Space

The Task Force recommends that the cleanup be carried out in a way that preserves these options for the decision-makers of the future—whether that is in 2006, 2010 or later.

Figure 4.1 Most of the scenarios include a redeveloped Industrial Area in the midst of extensive open space—the Buffer Zone. This new development could emphasize manufacturing, technology, and support office/commerce in a more traditional development (Scenario 1), it could attempt to attract environmental services and technology companies (Scenario 2), or it could become a university/federal laboratory research and development center (Scenario 3). The site also could be reserved for some future use not imaginable today (Scenario 4).

Figure 4.2 Rocky Flats played an important role in the Cold War. Perhaps a museum and research archives should



be built in the Industrial Area once it is cleaned up (Scenario 5). A museum could interpret the Cold War and the peace movement from an on-the-scene perspective. Clean foundations or entire buildings might be retained to help bring to life the complex and fascinating stories of this period. Also, this kind of complex could be integrated into a university/federal laboratory research and development center or other kind of development (Scenarios 1-4).

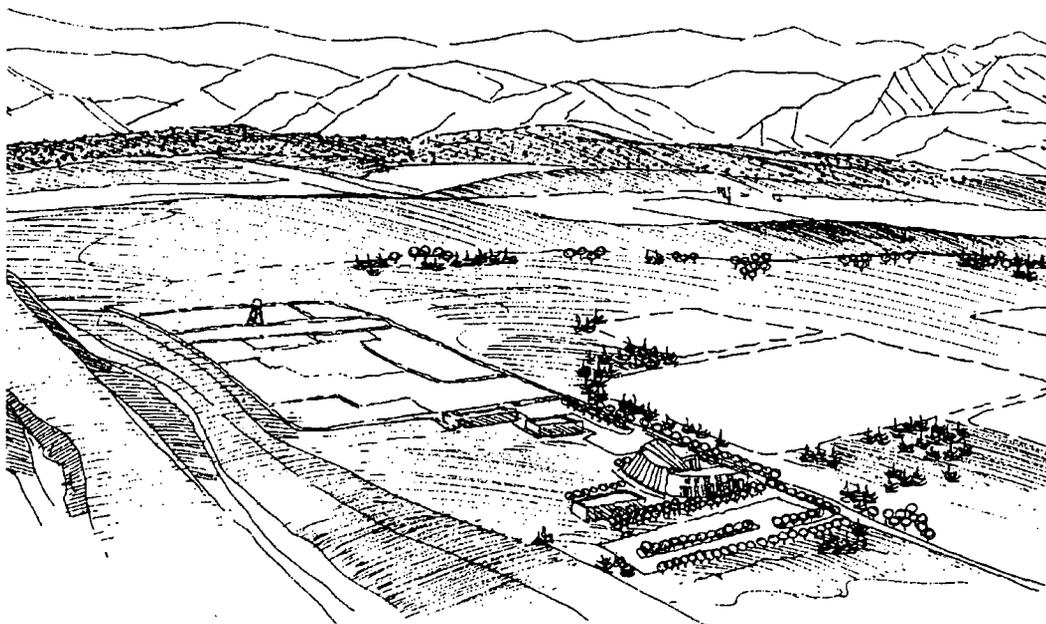
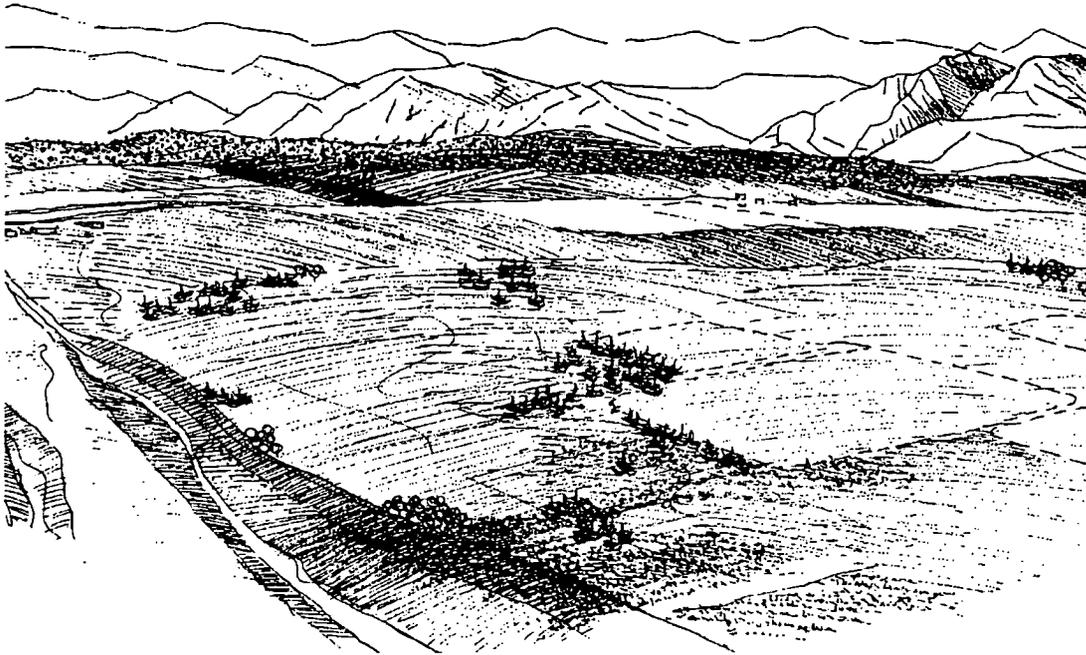


Figure 4.3 Although the land is disturbed, the best use of the Industrial Area may be as open space (Scenario 6). Economic activity could be located elsewhere on the site, such as in the western portion of the Buffer Zone, or off-site. This approach would create better habitat for wildlife by removing development from the center of what is an important and extensive natural area. It could also place development closer to regional infrastructure, such as roads and utilities. It may help accelerate changes in negative perceptions about the site related to its past. This open, reclaimed Industrial Area, illustrated above, would also characterize the interim use of the site if were to be held in reserve for some unknown future use (Scenario 4).



SCENARIO 1: INDUSTRIAL REDEVELOPMENT

Redevelopment as an employment center with industrial emphasis – manufacturing, technology and office/commercial uses. Seek to maximize employment on the site to replace jobs lost after cleanup is complete. Public/private partnership to accomplish site development. Phasing dependent upon private sector demand. Some reuse existing buildings may be warranted in initial phase of development – followed by new construction of.

In this scenario, the site is reused and redeveloped as an market-driven employment center which could include R&D, manufacturing and support uses. This is consistent with the previous use of the site as a manufacturing facility. Most buildings and infrastructure would be newly constructed.

It is envisioned that this process may utilize existing buildings and infrastructure for the initial stage of development, with renovations as determined to be economically and physically feasible. Development may best be staged from the west in order to avoid conflict with cleanup activities and allow for phasing of new infrastructure to serve the site. This approach may also be coordinated with the downsizing of infrastructure on-site and the potential outsourcing of utilities services and administrative office space during cleanup. It also opens up the possibility of allowing for development in some vacant areas that are adjacent to the Industrial Area.

In the absence of an anchor user for the site, development could proceed from the perspective of attracting a range of different tenants, predominately from the private sector.

Uses

- Employment uses of an industrial nature (R&D, manufacturing and support activities)

Features

- Utilize existing buildings and infrastructure as feasible; upgrade as required for current market standards.
- Begin development from the west to take advantage of existing buildings and areas which may already be clean or will be cleaned up early.
- Utilize existing buildings and infrastructure to provide business incubators, followed by construction of new buildings.

Assumptions

- Market support exists for this type of development on the site.
- Buildings and infrastructure can be economically maintained during cleanup.
- Current cleanup philosophy/program can be modified to allow staged reuse of the Industrial Area.
- Current cleanup philosophy/program can be modified to allow staged reuse of the Industrial Area.

Pro

- Economic and other benefits are realized in the short and long-term.
- New activities will accelerate the change in perception about Rocky Flats if done properly.
- Activities on-site are a catalyst for new development.

Con

- Infrastructure needs to be financed and constructed prior to knowing tenants.

- Caps as currently envisioned may complicate this approach.
- Future impact of surface mining to the west is unknown.

Ownership and Funding

- Requires that an entity be in place for maintenance, marketing and development
- Requires investment in infrastructure in advance of development.

Examples

- Interlocken, Inverness, Denver West

SCENARIO 2: ECO-INDUSTRIAL PARK

Reuse of site proceeds according to "Eco-Industrial Park" model that emphasizes proximity to the former remediation-site and ecological resources of Buffer Zone. Development is targeted to environmental services and technology companies. Site is managed according to principles of energy and resource efficiency.

This scenario envisions that reuse of site occurs in a manner that is consistent with the theme of sustainable development. This approach could take advantage of the site's proximity to the former remediation site and ecological resources of Buffer Zone. Although the overriding philosophy of the project would be quite different from Scenario 1, many of the physical features might be similar to Industrial Development. However, marketing and overall management of the park would be committed to principles of energy and resource efficiency.

Uses

- Employment uses of an industrial nature (R&D, manufacturing and support activities) and service sector
- Environmentally-sustainable uses
- DOE stewardship

Features

- Develop an industrial park and employment center based upon environmental technology companies and sustainable development principles.
- Continue momentum of existing emphasis ecological resources, on-site cleanup and environmental technologies.
- Utilize existing buildings and infrastructure to provide business incubators, followed by construction of new buildings.

Assumptions

- Sufficient demand and interest exists in the region to establish an eco-industrial park.
- Buildings and infrastructure can be economically maintained during cleanup.
- Current cleanup philosophy/program can be modified to allow staged reuse of the Industrial Area or new construction of buildings and infrastructure if cost-effective.

Pro

- New "environmentally sustainable" activities will accelerate the positive change in perception about Rocky Flats.
- Economic and other benefits are realized in the short and long-term.
- Focuses on concept of environmental restoration and sustainability.

Con

- Competitive with other planned projects in the region (Stapleton redevelopment).

- Entails market risk for users and master developer.
- Existing buildings may be obsolete for future reuse or may deteriorate and ongoing maintenance costs for buildings and infrastructure will have to be funded.
- Infrastructure needs to be financed and constructed prior to knowing tenants.
- Caps as currently envisioned may complicate this approach.

Ownership and Funding

- Requires that an entity be in place for maintenance, marketing and development.
- Requires investment in infrastructure in advance of development.
- May require significant public sector sponsorship to be successful.
- Requires specialized expertise for design and tenant recruitment.

Examples

- Stapleton (proposed), Kalundborg (Denmark), Chattanooga (TN)

SCENARIO 3: UNIVERSITY/FEDERAL LABORATORY R&D CENTER

Redevelopment of site capitalizes on proximity to NREL, NOAA, NIST, NCAR, federal offices, universities, non-profit organizations and private sector businesses. Site is used as a resource for research and facilities for these organizations related to current environmental issues and trends (global warming, renewable energy, environmental remediation, etc.). This approach could result in significant on-site employment related to research and related uses or limited research and education-related employment on site. While the facility would be public sector in nature, it could include private sector tenants.

The scenario contemplates developing a major R&D facility or complex at Rocky Flats, after cleanup, of a predominately institutional and governmental nature. Reuse of the site would capitalize on its proximity to Federal laboratories and offices, universities, non-profit organizations and private sector businesses, all of which are located along the foothills of the Front Range of metropolitan Denver and which together form a "corridor" of advanced technology and research.

The site could be used as a resource for research and facilities for these organizations related to environmental issues and trends (global warming, renewable energy, environmental remediation, etc.) or other matters. This approach could result in significant on-site employment related to research and related uses. While the facility would be public sector in nature, it could include private sector tenants.

Uses

- R&D, administrative and support uses
- DOE stewardship of site.

Research and education activities related to the Buffer Zone and environmental remediation.

Features

- Builds upon the presence of key institutions along the Front Range and allows for their expansion onto the site - university, Federal, public and non-profit.
- Provides an opportunity to "look forward" to new technologies and activities, and relates to the ecological resources management and environmental cleanup already occurring on the site.
- Employment potential could be small or large, tied to very high-skill academic and research activities.
- Provides for the ongoing management and interpretation of the Buffer Zone in coordination with reuse of the Industrial Area.
- Private sector tenants might also be present if they are compatible with the other activities and contribute to the concept of an R&D center.

Assumptions

- Regional academic institutions can and will direct their future activities to the site.
- Major Federal programs (such as NREL) will have requirements to expand their facilities in the area and could utilize Rocky Flats.
- Public sector funding can be provided to develop the concept.
- Current cleanup philosophy/program can be modified to allow staged reuse of the Industrial Area.

Pro

- The region would benefit from long term economic benefits to the region that result from enhanced R&D.
- Project could strengthen local academic and research institutions by providing sites for future expansion.
- R&D uses are compatible with interim cleanup activities and use restrictions that may be required in the future.
- Promotes the integration of "public" and "private market" uses – including spin-off uses related to the cleanup activities.
- Compatible with the ongoing DOE stewardship and physical presence on the site.

Con

- Significant public funding will be required.
- Because of the public nature of the facility, direct fiscal benefits (such as taxes) might not be as great as a primarily private sector development.
- There will be maintenance costs for buildings and infrastructure that are retained.
- Caps as currently envisioned may complicate this approach.

Ownership and Funding

- Requires that an entity be established to oversee the implementation of this concept.
- Reuse authority could act as bridge between DOE and actual site users (employment center in particular)
- R&D concept is achievable under public ownership and DOE stewardship. Public or non-profit organization is most likely.

Examples

- Federal labs/offices (above), CU Research Park

SCENARIO 4: SINGLE TENANT, "JEWEL" USE

Site is reserved for a future single tenant – currently unknown – that captures the imagination of the community 5, 10 or 15 years in the future. Decisions about the nature of this future "jewel" use are postponed for a future discussion, but the Industrial Area is cleaned up and retained in a condition that will allow for future development.

This concept is based upon the premise that the site's intrinsic value may be best realized in the future – after cleanup has occurred and in response to market and other conditions which may not currently exist. This approach allows cleanup to proceed with the understanding that all or portions of the Industrial Area and some vacant land immediately adjacent to it may be developed in the future. Decisions about specific users in the Industrial Area would be postponed until a time closer to when the site will actually become available. Consistent with community desires, the Buffer Zone would be preserved and managed as open space.

This approach allows the site to be considered for future, as yet unknown, employment uses that could yield maximum long-term benefits. Future use could take advantage of the site's unique characteristics and provide a broad range of benefits to the region. By retaining the site as an integral whole until this future vision can be achieved, piecemeal and opportunistic development (and associated costs) can be avoided.

Uses

- "Future development" – uses not specified, but could include corporate headquarters, research center, and university campus.
- DOE stewardship

Features

- The site undergoes cleanup and then is managed in a non-development state ("future development").
- All buildings and on-site infrastructure are removed to the maximum feasible level.
- Off-site infrastructure may be extended to the site in coordination with surrounding development plans.

Assumptions

- The "highest and best" use of the site will be easier to identify in 10 – 25 years, after the site has been cleaned up.
- Regional conditions and needs may be different in 10-25 years than they are today.
- The site can be zoned as "future development" until after cleanup has occurred and a future use is identified. The site will not be treated as permanent open space.

Pro

- Maintains maximum flexibility with regard to future use – most options are preserved.
- "Holding" costs are minimal.
- No new infrastructure is required in advance of development.
- "Future development" status allows for future cleanup with improved technology.

Con

- Does not result in short term revenue or other economic and employment benefits.
- Negative image of site persists because no new concept for the site is put forth.
- Future development option may diminish as site is perceived as "open space".
- Marketing of site may suffer from piecemeal response to future opportunities when these are presented.
- Caps as currently envisioned may complicate this approach.

Ownership and Funding

- Requires local entity (public or non-profit) to oversee site and to preserve future development options and to evaluate prospective uses (non-DOE management).
- Funding for future infrastructure will be implemented with specific future project, although some costs/efforts to "position" the property for future development may be required.
- Minimal level of funding required for interim management.

Examples

- University Campus, National Center for Atmospheric Research, Major Corporate Headquarters

SCENARIO 5: COLD WAR MUSEUM AND ARCHIVE

After cleanup, the former Industrial Area is converted to open space in order to be fully integrated with the surrounding 6,065 acres of the Buffer Zone. This action recognizes that the Industrial Area itself has been disturbed by the original construction, industrial use and remediation/cleanup process. There is no attempt to establish an Employment Center on the site, although an interpretive center could be constructed for educational or research purposes. Restrictions on use of the open space may apply.

In this scenario significant parts of the uncontaminated buildings and infrastructure stay in place (when feasible) and serve as a memorial to the end of the Cold War and to aid in the interpretation of the site. One or more of the clean buildings becomes a museum with exhibits that helps to interpret the site and its relationship to the Cold War. Artifacts are retained from facilities prior to demolition. A research center and archives is established on the site for use by scholars and the public.

To the degree possible within the cleanup plan and within DOE requirements, the ruins of some buildings—stabilized so they are safe and cleaned up to meet the requirements of the community—become a powerful reminder of the financial, human, and ecological costs of the Cold War and the great significance to humankind of its end. Most of the buildings and infrastructure are viewed from outside (on foot or tram), a few are open to the public.

Limited trails are created for contemplation of the site and its stories. The buffer provides a respite and psychological balance to the stern stories of the core area. The buffer provides views to the mountains and plains, which symbolize the larger world and remind visitors of the significance of the end of the Cold War.

A second significant history of Rocky Flats is its role as a national symbol of the Peace Movement. This role, too, should be documented.

Uses

- Museum
- Scholarly research center and archive
- Site as memorial
- DOE stewardship

Features

- Maximizes and retains the sense of Rocky Flats as a key player in the Cold War.
- Interprets the activities of the Cold War and its peace movement for future generations.
- Manages and interprets the buffer, which was a direct result of the high security needed for the facility, as a part of the place that was Rocky Flats.

Assumptions

- There is an appropriate entity ready to fund and manage the site for these mostly non-income-generating uses.
- Public funding can be secured for the development and operation of the facility.

Pro

- Improves the cultural quality of the region and could contribute to off-site economic benefits.
- Does not compete with private sector development and is independent of market forces.

- Provides an effective site for memorializing “healing” and provides effective location for telling the stories related to the Cold War.
- Non-intensive use of the core is more compatible with the restoration and management of the buffer.

Con

- There will be costs for the buildings and infrastructure that are retained.
- The perception of Rocky Flats as a contaminated place, or at least a formerly contaminated place, will remain. Under this scenario the site doesn’t become a “greenfield.”
- High skill level plant/cleanup employees are not retained.
- Generates little or no direct income, is a potential “white elephant” that generates minimal on-site economic benefits.
- Caps as currently envisioned may complicate this approach.

Ownership and Funding

- A unique public and/or non-profit organization to fund and run the museum/research center would have to be put into place – could be public/private/philanthropic.
- Could be a cooperative venture with DOE, the community and the National Park Service, Department of the Interior or other federal agency.

Examples

- Several museums exist which document the Manhattan Project – but few go beyond 1945.

SCENARIO 6: OPEN SPACE

After cleanup, the former Industrial Area is converted to open space in order to be fully integrated with the surrounding 6,100 acres of the Buffer Zone. This action recognizes that the Industrial Area itself has been disturbed by the original construction, industrial use and remediation/cleanup process. There is no attempt to establish an Employment Center on the site, although an interpretive center could be constructed for educational or research purposes. Restrictions on use of the open space may apply.

In this scenario, existing buildings, infrastructure, and contaminated materials – all evidence of prior human use—are removed from the site and historical ecosystems are restored. Trails and other forms of passive recreation are constructed on parts of the site, while other areas are used for teaching and research into ecology and restoration. Although the Industrial Area is the most contaminated portion of the site, it may make sense in planning terms to avoid having a 300-acre island of development surrounded by open space.

This process aims for a physical and psychological “healing” of the site.

Uses

- Managed open space for wildlife habitat, native vegetation, ecology teaching and research, aesthetic buffer, protection of surface water quality and passive recreation.
- DOE stewardship

Features

- Extensive wildlife habitat is protected and expanded.
- Hiking and other forms of passive recreation are allowed in areas where risks have been reduced and impacts to wildlife and native vegetation can be controlled.
- Vast areas are devoted to research and teaching and not open to the general public.
- Subject to potential protective caps and appropriate institutional controls concerning use of open space.

Assumptions

- There is an appropriate entity ready to fund and manage the site for this non-income generating use.

Pro

- The ecological integrity of the site is improved by removing and precluding development from the center of the site (i.e., habitat fragmentation is reduced and usefulness to wildlife increased).
- The existing regional system of open space created by the counties and cities is enhanced and maximized.
- Rocky Flats fades away as a human-developed site and Rocky Flats re-emerges as a topographic, physiographic, and ecological place.
- There is “ecological healing”.
- Enhances property values of surrounding lands.
- Does not entail market risk or compete with the private sector.
- Profound, but subtle memorial to the end of the Cold War.

Con

- Does not generate revenue but would require funding for maintenance and operations.
- Caps as currently envisioned may complicate this approach.

Ownership and Funding

- Entity needed to oversee the implementation of the concept and to provide funding.
- DOE probably maintains ownership of site and subcontracts management to a local jurisdiction.
- No income is generated.
- Could be completed with existing organizations, no new entity needed.
- Some entity would be responsible for the entire 6500-acre site.

Examples

- There are numerous examples of regional-scale open space exist in the metro area.

5. Implementation Strategies

Much of the discussion of the Rocky Flats Industrial Area Task Force has revolved around timing and the uncertainty of when the Industrial Area would be available for reuse and what condition it will be in. If the land were available in the next ten years, it may make sense to retain some of the clean buildings and infrastructure. On the other hand, if the plutonium currently stored at Rocky Flats does not leave until 2015 or later, reuse of existing facilities may not be feasible. If such is the case buildings should be removed as part of cleanup, and the site should be left in a condition compatible with redevelopment. The success of reuse at Rocky Flats will depend on an alliance between the community and DOE. The nature of the reuse will depend on market conditions, cleanup results and community preferences at the time. Community support for development costs and public perceptions of the site and its history will also play roles.

The Task Force developed three strategies for the transition in control of the Industrial Area from DOE to the community. They are:

- A. "Aggressive and Timely Reuse"
- B. "Preserving Options"
- C. "Hands-Off"

These alternatives have been formulated to represent clearly different approaches to undertaking reuse of the Industrial Area and are based upon the assumption that ultimately the site will be suitable for uses ranging from full development to open space. The strategies are characterized in terms of:

- Overall Concept
- Features
- Implementation Considerations for Development Options (cost, site, and institutional factors)
- DOE Contractor Involvement.

When reviewing the alternatives, it is useful to compare them in terms of the role of a community reuse organization, potential costs and benefits to the community, timing, and implications for the cleanup plan. It is assumed that each of the alternatives could accommodate any of the land uses that were discussed previously by the Task Force (and presented in terms of six reuse scenarios), although some are clearly more suitable than others.

Each strategy calls for the creation of a community-based entity through cooperation of affected local governments. Ultimately, its powers would include implementing transition of the site from DOE to local control. It is the timing of that implementation that varies. Recommendations of the Task Force regarding the proposed mission, purposes, composition and funding of the community-based entity are presented at the end of this report.

<p>A. "Aggressive and Timely Reuse"</p>	<p>B. "Preserving Options"</p>	<p>C. "Hands-Off"</p>
<ul style="list-style-type: none"> This strategy seeks to accelerate, to the maximum degree possible, the reuse of the site. 	<ul style="list-style-type: none"> This strategy seeks to respond to the inherent uncertainties of cleanup. The community creates a formal mechanism to plan, advocate and cooperate on issues related to Rocky Flats' future. 	<ul style="list-style-type: none"> The community does not engage in a formal, coordinated action related to the future site reuse until cleanup is nearly complete.
<ul style="list-style-type: none"> The community would promptly form a reuse authority with the ability to finance infrastructure and lease buildings. This entity would work closely with the U.S. Department of Energy (DOE) to determine opportunities for joint development and financing of infrastructure as well as allow for the rapid phasing of ecological restoration of disturbed areas. 	<ul style="list-style-type: none"> The contractor, Kaiser-Hill, proceeds according to the cleanup plan and removes all buildings and infrastructure – while the community closely monitors the process to ensure that cleanup leaves the site in a condition that facilitates future use. 	<ul style="list-style-type: none"> The community would recommend that DOE leave the Industrial Area in a condition suitable for use as an Employment Center, but implementation of this would be left to the cleanup contractor, Kaiser-Hill, with oversight by the individual communities which are most affected.
<ul style="list-style-type: none"> Reuse options to be considered range from open space to active development. 	<ul style="list-style-type: none"> As the completion of cleanup approaches and a firm schedule is established for removal of plutonium and wastes, the community would form a reuse authority to implement reuse. 	<ul style="list-style-type: none"> Once cleanup is complete and the post-cleanup conditions of the site are better known, the communities would reconvene and determine the desired use of the site and the preferred implementation mechanism – based upon conditions at the time.
<ul style="list-style-type: none"> Some existing buildings could be converted to commercial use in coordination with cleanup to minimize holding costs for the community. 	<ul style="list-style-type: none"> Reuse options to be considered range from open space to active development. 	<ul style="list-style-type: none"> Options to be considered range from open space to active development.
<ul style="list-style-type: none"> Reuse could be phased as specific areas are made available to the community. 	<ul style="list-style-type: none"> Infrastructure costs may be higher in this option because the community would proceed without DOE as a partner – but costs would be delayed until specific tenants are identified. 	<ul style="list-style-type: none"> Although this strategy is least expensive in the short term, it also results in the greatest uncertainty about post-cleanup conditions of the site and may forgo opportunities that arise in the mid-term.
<ul style="list-style-type: none"> A marketing program would be developed to attract potential tenants. 	<ul style="list-style-type: none"> The community would not have to pay to refurbish buildings or infrastructure, but instead would be responsible for developing and financing infrastructure and otherwise facilitate reuse. 	
<ul style="list-style-type: none"> This strategy could provide the earliest economic benefits to the community, but would also require greater public investments early on. 		



"AGGRESSIVE AND TIMELY REUSE"

This strategy seeks to accelerate, to the maximum degree possible, the reuse of the site. The community would promptly form a reuse authority with the ability to finance infrastructure and lease buildings. This entity would work closely with the U.S. Department of Energy (DOE) to determine opportunities for joint development and financing of infrastructure as well as allow for the rapid phasing of ecological restoration of disturbed areas. Reuse options to be considered range from open space to active development.

Some existing buildings could be converted to commercial use in coordination with cleanup to minimize holding costs for the community. Redevelopment could be phased as specific areas are made available to the community for reuse. A marketing program would be developed to attract potential tenants.

This strategy could provide the earliest economic benefits to the community, but would also require an early decision on specific uses and greater public investments early on.

Features

- DOE maintains buildings selected for potential reuse until cleanup is completed. The community could assume responsibility after this (460, 130 and 131 are priority buildings for reuse because of their condition and location). There may be a transition period of two years necessary for the community to prepare the buildings for lease.
- Early in the transition process, there is potential for construction of new buildings and infrastructure in the western portion of the site.
- A reuse authority is created with authority to negotiate, monitor, plan, and finance the reuse.
- Infrastructure brought to the site during cleanup may be financed jointly by DOE (to the extent they would otherwise pay for temporary utilities) and the Redevelopment Authority so it can be useful for redevelopment.
- Cleanup results in a very reusable site, i.e., unneeded underground utilities and tanks are removed. Some areas (e.g., Bldg. 130) will be explored for reuse prior to 2010.
- This approach requires consistent community/local government and DOE/Kaiser-Hill support.
- DOE must maintain areas to the west in a state that allows for their early release to the community (i.e., new plutonium vaults or waste storage facilities are not built there).
- Community aggressively pursues site cleanup and preparation to facilitate reuse options.

Implementation Considerations for Development Options

Costs

- This option is likely to result in the highest financial costs to neighboring communities between now and 2010.

Site

- Off-site infrastructure is extended to the site to serve cleanup and long-term site reuse.
- On-site infrastructure upgrades may occur to serve cleanup and long-term reuse.
- New infrastructure may be constructed in areas for new development.
- Cleanup results in a commercially useable site.

Institutional

- An implementation entity (redevelopment entity) is established in the near future to pursue active reuse of the site.
- Partnerships between the entity, DOE and surrounding jurisdictions are developed.
- Approach requires proactive steps by the local communities to establish and fund a reuse entity.

DOE Cleanup Contractor Involvement

- Needs to coordinate dates for decontamination and decommissioning and environmental restoration with community.
- Becomes a customer for infrastructure projects.
- Needs to "buy into" the concept and plan for cleanup that accommodates commercial reuse of the site that may be concurrent with cleanup.
- Participates in the reuse planning process through coordination and cooperation with the local redevelopment entity.
- Maintains buildings and infrastructure until turned over to the community.



"PRESERVING OPTIONS"

This strategy seeks to respond to the inherent uncertainties of cleanup by keeping the community out of direct involvement in reuse during cleanup while continuing planning, advocacy, public information and intergovernmental cooperation activities. The contractor, Kaiser-Hill, proceeds according to the cleanup plan and removes all buildings and infrastructure—while the community closely monitors the process to ensure that cleanup leaves the site in a condition that facilitates future use.

As the completion of cleanup approaches and a firm schedule is established for removal of plutonium, the community would form a reuse authority to plan and implement reuse. Reuse options to be considered range from open space to active development.

Infrastructure costs may be higher in this option because the community would proceed without DOE as a partner—but costs would be delayed until specific tenants are identified. The community would not pay to refurbish buildings or infrastructure, but instead would be responsible for developing and financing infrastructure and otherwise facilitate development.

Features

- This option "cleans the slate" for future development after cleanup is completed.
- It includes the opportunity to wait for a "jewel," a tenant that is uniquely suited to the site but that is not known now.
- Avoids piecemeal development that may characterize Option A. Some market uses may be deemed to not be suitable for the site.
- A community-based entity endorsed by local governments is established about 3-5 years before cleanup is complete, for planning, advocacy and intergovernmental cooperation. After this, the entity will expand into an active redevelopment entity.
- Buildings and infrastructure on the site are removed as part of the cleanup of the site.
- Provides community with flexibility to respond to the future market in 2010 and beyond.

Implementation Considerations for Development Options

Cost

- This option will result in lower costs to neighboring communities than Option A ("Aggressive and Timely Reuse"), but greater costs than Option C ("Hands-Off"). Major costs (e.g., infrastructure) would not be incurred until 2010 or later.

Site

- Off-site infrastructure may be extended to the site to serve cleanup and long-term site use.
- Buildings and infrastructure on the site are removed as part of the cleanup, in a manner that results in a commercially useable site.
- Clean obsolete infrastructure (basements, pipes, wires, etc.) is removed and the ground is left suitable for reuse.

Institutional

- An interim reuse planning entity continues. A "full service" redevelopment entity is established in the future, closer to when cleanup is complete. Community plans for stewardship and future management of the Buffer Zone could also be facilitated by this entity.

- Partnerships between the entity, DOE and surrounding jurisdictions are developed.
- Requires that the local community continues current level of planning and coordination until cleanup is complete. Reuse that follows cleanup will also require community support.
- Up-front costs are delayed until the site is closer to being made available to the community.

DOE Contractor Involvement

- Needs to coordinate decontamination, decommissioning, and environmental restoration with the community entity.
- Needs to "buy into" the concept and plan for cleanup that results in a site suitable for reuse.
- Participates in the planning process through coordination of the cleanup plan.
- May be a customer for off-site infrastructure.
- Does not have to retain buildings for reuse by community.



The community does not engage in formal, coordinated action related to the future site reuse until cleanup is nearly complete. The community would recommend today that DOE leave the Industrial Area in a suitable condition for use as an employment center, but implementation of this would be left to the cleanup contractor, Kaiser-Hill, with oversight by the individual communities which are most affected.

Once cleanup is nearing completion and the post-cleanup conditions of the site are better known, the communities would reconvene and determine the desired use of the site and the preferred implementation mechanism—based upon conditions at the time. Options to be considered range from open space to active development.

Although this strategy is least expensive in the short term, it also results in the greatest uncertainty about post-cleanup conditions of the site and may forgo opportunities that arise in the midterm.

Features

- A redevelopment authority is not established until about 1-3 years before cleanup is complete.
- DOE is responsible for implementation of cleanup in the interim, with monitoring by the CAB and local governments.
- Site may not be suitable for commercial reuse or may require additional preparation after cleanup to make it commercially useable because of obsolete infrastructure abandoned in place or other conditions (e.g., barbed-wire fences around caps) that conform to RFCA, but are not conducive to redevelopment.

Implementation Considerations for Development Options

Costs

- Of the three options, Option C (Hands-Off") will likely result in the lowest cost to neighboring communities between now and 2010.

Site

- Site is cleaned up according to RFCA but may lack augmentations to make it commercially useable.

Institutional

- RFLII documents community desires for future reuse prior to disbanding.
- A redevelopment entity is established in the future, closer to when cleanup is complete.
- Partnerships between the entity, DOE and surrounding jurisdictions may be developed after cleanup is complete.
- Gives DOE flexibility in approaching cleanup consistent with RFCA.
- Cleanup oversight will be accomplished solely through CAB and individual local governments. No joint local community planning or advocacy relative to future use.

DOE Cleanup Contractor Involvement

- Cleanup proceeds according to RFCA but without additional reuse criteria or drivers.

REUSE OF THE ROCKY FLATS INDUSTRIAL AREA

- May become a customer for off-site infrastructure projects (to be built to DOE requirements—not future site needs).
- Participates in the planning process only in the final stage of cleanup plan (when community entity is established).

6. Task Force Recommendations

TASK FORCE CONSENSUS RECOMMENDATION

The Rocky Flats Industrial Area Transition Task Force was formed to evaluate what use or uses for the 385-acre Rocky Flats Industrial Area after completion of the cleanup are desired by the community and whether existing buildings and infrastructure should be preserved to support such future use(s). The Task Force evaluated a range of options including industrial/office redevelopment, public uses such as museum or research, and open space. Each of these options has champions in the community, and other options may emerge later. It is clear from our research that specific decisions for future use of this land cannot be made at this time. Future decisions and conditions will all affect the community's consideration of the precise use of this land after site closure for which DOE has set a goal of 2006. These include disposition of plutonium, the nature and extent of environmental redemption, condition of the site at the completion of cleanup actions, future market conditions, public sentiment, and development activities in the region. It is clear that the entire Rocky Flats site is highly valued by the community and we are willing to continue cooperative efforts to assure a stringent cleanup that will preserve a range of options for the future.

The Task Force evaluated the reuse potential of seven buildings at Rocky Flats: 125, 130, 130W, 131, 440, 460, and 850 as well as existing infrastructure. Following thorough analysis, the Task Force concluded that while four facilities-130, 130W, 131 and 460- could be made viable in the year 2010, these buildings are not essential for the successful reuse of the site, even for an industrial center. If a future use is selected that necessitates facilities and/or infrastructure, they would be constructed according to specifications of future users at that time. Therefore, in order to not encumber site closure, the Task Force recommends that all facilities and infrastructure be decontaminated, demolished, and removed as part of the Rocky Flats cleanup and closure project. If any new facilities or infrastructure are developed by the site prior to closure, such arrangements should be planned and implemented in conjunction with the community to assure preservation of future options and interim benefits to the community.

In this context, there are implications for the conduct of the Rocky Flats cleanup. It is clear from the discussions within the Task Force and input from the public during our process that the protection of public, worker and ecological health during and after Rocky Flats cleanup is the paramount concern of the public. We support the requirement in the Rocky Flats Cleanup Agreement to clean up the Industrial Area to a standard suitable for a future employment center regardless of other potential uses. The cleanup plans must consider two elements: preserving a range of future use options and taking into account long term stewardship implications for ongoing protections of public health and the environment.

Covers or caps should be utilized only in situations where sufficient technology does not exist to re-remediate sufficiently to assure acceptable risks, not just to save money. If caps or covers are utilized, their design must accommodate both long term stewardship and compatibility with adjacent future uses. The potential of future breakthroughs in cleanup technology should also be considered and preserved in the design of cleanup actions. If current projections for off-site disposition of special nuclear materials and waste are not realized, interim treatment and storage facilities-both new construction and reutilization of existing buildings-should be located in light of potential future use options which favor the western portion of the site. Therefore, locations in the present Protected Area and eastern Industrial area should be utilized for any long term DOE

missions in lieu of locations in the buffer zone, adjacent to the western entrance road, the 130 area, or west of Building 460. Finally, the cleanup plan should be modified to remove clean, residual, unusable infrastructure such as foundations, utilities, pipes, tanks, and tunnels as their retention would be an impediment to future redevelopment. All potential future uses would require removal of these materials.

The Rocky Flats site has provided and continues to provide thousands of jobs and concomitant revenues and other benefits to adjacent communities. As the Rocky Flats site is transitioned to local control there are likely to be other measures beyond potential redevelopment of the Rocky Flats Industrial Area that can enhance the quality of life and economy of the Northwest Metro Area. These should be identified and pursued cooperatively by DOE and its contractors, local governments and the private sector.

The community, through the cooperation of its local governments, should establish an ongoing entity with authority, resources, and credibility to oversee the cleanup and other activities at the Rocky Flats site to assure compatibility with community interests and preservation of future use options. This entity would plan the transition of the entire Rocky Flats site to local control after cleanup and closure, and assure its implementation. It would also negotiate a long term stewardship agreement with DOE. Principles for this entity are discussed below.

Several other issues were discussed by the Task Force, its consultants, constituent local governments, and the general public during the course of our deliberations that are beyond the purview of the Industrial Area Transition Task Force. These include Buffer Zone open space preservation, the mountain backdrop project, highway safety and planning, worker transition, regional planning, documentation and interpretation of Rocky Flats' role in the Cold War, and long term stewardship. We acknowledge the salience of these issues and encourage that they be discussed in the near future in appropriate forums. However we as a Task Force do not have recommendations about these adjunct issues. We also note that there is great interest on the part of the general public in the future of Rocky Flats and encourage continuation and enhancement of opportunities for education and dialogue about all these issues.

PRINCIPLES FOR THE ROCKY FLATS LOCAL IMPACTS INITIATIVE SUCCESSOR

Proposed Mission Statement

Provide an effective, credible and accountable mechanism for affected local governments and their citizens to jointly identify, evaluate, discuss, communicate, resolve and advocate for issues of mutual concern relating to the future of the Rocky Flats Environmental Technology Site during cleanup; and serve as the agent of the community to plan and implement transition of the Rocky Flats site from the Department of Energy to local control.

Proposed Purposes

The purposes will evolve as cleanup proceeds. In the near term, the focus will be on assuring that actions and policies of DOE and other decision makers protect the site and the public health and preserve land use options for the future. As more is known about the disposition of special nuclear materials and waste and the nature and extent of environmental remediation and its effect on the configuration of the site, the entity can plan for long term preservation and management of the buffer zone as open space, negotiate long term stewardship agreements with DOE to ensure ongoing information about and protection of public health and the environment following cleanup, and discuss other issues such as transportation rights of way, regional plans, potential infrastructure, and future use of the industrial area.

Once cleanup is nearing completion, the focus will again change to implementing transition of the land to local control, consistent with the plan. During all these phases, the entity will assure that past community efforts (such as the Future Site Use Working Group and Industrial Area Transition Task Force) are respected as conditions change and will serve as their advocate and interpreter as conditions change.

Ongoing functions would be to represent the community's interests in the land and its resources at regional planning discussions, serve as a focal point for community partnerships with DOE and its contractors for issues of mutual interest such as transportation safety improvement and natural resource management, promote public participation and information regarding Rocky Flats, and advocate policies, plans and activities with local, state, and federal officials and the public. Depending on the decisions about future land management and stewardship, there may or may not be an ongoing role for this entity after the site is transitioned to local control.

Proposed Composition

The entity primarily should be a mechanism for local governments to cooperate and make joint decisions concerning Rocky Flats transition and to create a local "agent" to act on behalf of the community's interest in the land resource with DOE and the region. Its powers should include those of a redevelopment authority for maximum future flexibility in brokering reuse planning and implementation. Although they may not necessarily serve on the governing board, substantive involvement by other affected stakeholders, including owners of adjacent land and mineral rights, should also be provided for. The Rocky Flats site is contiguous to Boulder and Jefferson Counties, the cities of Broomfield, Westminster and Arvada, and the Town of Superior. The City of Boulder owns significant open space land contiguous to site on the north and the State of Colorado Land Board owns a parcel to the south.

Governmental powers such as immunity, ability to receive donated federal property, open meetings and open records provisions are important. Creation of the entity should be memorialized in a way that demonstrates its credibility to the federal government and the citizens of the region, and it should include some mechanism for endorsement by the State of Colorado. It should meet DOE Office of Worker and Community Transition criteria for designation as a Community Reuse Organization in order to qualify for CRO preferences and funding. The new entity's name should reflect the new mission and not be called "RFLII." At the same time, positive lessons learned from the success of RFLII should be incorporated into the charter, governance and operation of the new entity.

Potential Funding

RFLII has set aside some funds to provide operational support for a smooth transition to a new entity. It must meet DOE criteria for inclusion and participation to be designated as the Community Reuse Organization, gain the preferences that accompany this designation, and be eligible for receipt of these Community Transition funds. Since the entity would be working with state and federal legislators on behalf of its members, local funding should be made available for political activities—probably from local governments and the private sector. For the portion of its work relating to future use and long term stewardship, DOE funding is possible. There are various state programs that could be approached for efforts to transition the buffer zone to open space protection, including Great Outdoors Colorado and the Colorado Department of Public Health and Environment. Public information/education activities could also be supported by state and federal agencies.

Appendices

SUMMARY OF PUBLIC ENGAGEMENT PROCESS

LIST OF INFORMATIONAL INTERVIEWS

LOCAL GOVERNMENT BRIEFINGS

FUTURE SITE USE WORKING GROUP PARTICIPANTS