

# **Community Involvement Plan Update**

*Former*  
**AIR FORCE PLANT PJKS**  
*Waterton, Colorado*

**September 2010**



**U.S. Air Force  
Aeronautical Systems Center  
ASC/WNVR  
1801 Tenth Street, Suite 2  
Wright-Patterson AFB OH 45433  
1-800-982-7248 ext. 53593**

*This Community Involvement Plan describes the community involvement and public participation program for former Air Force Plant PJKS (PJKS) in Waterton, Colorado.*

*The Air Force continues its effort to protect human health and the environment by locating, investigating and cleaning up waste sites. Its environmental program follows federal and state policies for environmental quality and comprises aggressive Air Force strategies for site restoration and pollution prevention. The Air force promotes its good neighbor policy by supporting an effective community involvement plan.*

*This plan updates the previously updated Community Relations Plans (CRPs) dated March 2003 and June 1998, and the original CRP dated April 1993. For more information contact Judy Charles at 937-255-3593 or 1-800-982-7248 extension 53593.*

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## **INTRODUCTION**

This former Air Force Plant PJKS (PJKS) Community Involvement Plan has been prepared pursuant to Sections 113(k)(13)(i-v) and 117 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) and in accordance with the current U.S. Environmental Protection Agency (EPA) Superfund guidance, including the *Superfund Community Involvement Handbook* (April 2002).

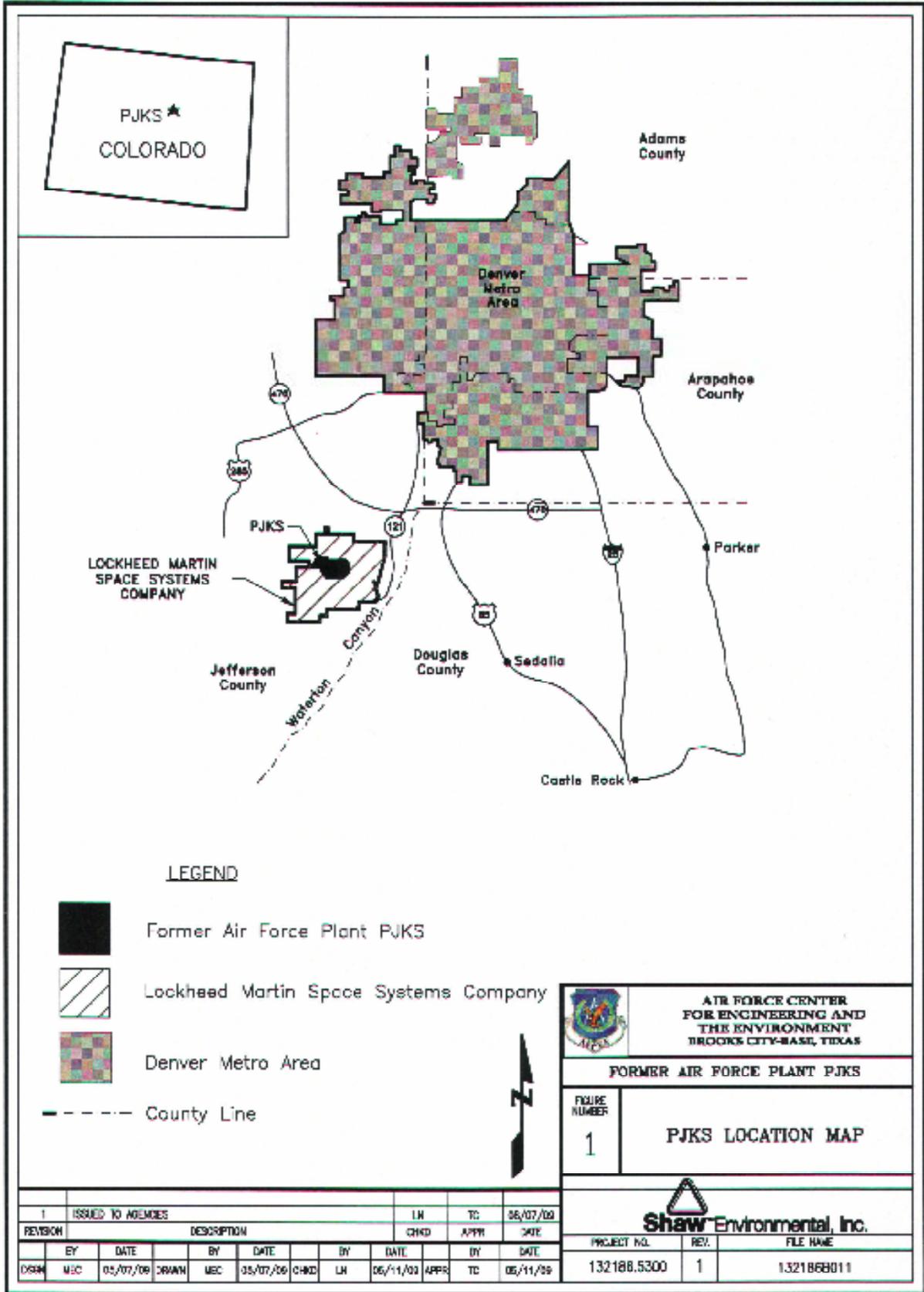
This site was listed on the National Priorities List (NPL) in November 1989 and is known as a federal facility funded for cleanup through the environmental response action activities using the Environmental Restoration Account (ERA). This environmental cleanup is 100% federally funded.

This Community Involvement Plan revision for PJKS is intended to reflect changes, both actual and perceived by the community, since the last revision dated March 2003. The Air Force revised this Community Involvement Plan to continue identifying and addressing communication needs of the community surrounding former Air Force Plant PJKS. This revised plan is managed by the Air Force Environmental Restoration Program and intended to further enhance coordination and information exchange between the community, Air Force, Colorado Department of Public Health and Environment, and U.S. Environmental Protection Agency, Region VIII in Denver. This plan provides an overall reference tool and plan for all interested in the cleanup program at PJKS and a proposed means for communication after the program closes. This Community Involvement Plan is the latest update in a series of plans designed to provide citizens with information about the environmental cleanup of PJKS.

The purpose of this Community Involvement Plan is to document community concerns and identify community involvement activities that will be used to encourage two-way communication between Air Force personnel and the public about these concerns and the environmental investigations and removal actions at PJKS.

### **Objectives of the Community Involvement Plan**

- 1) Provide community members, local officials, community leaders, public interest groups and affected parties with accurate and timely information.
- 2) Maintain open communication between the Air Force, Lockheed Martin, the Colorado Department of Public Health and Environment, the Environmental Protection Agency and Restoration Advisory Board members.
- 3) Identify and respond to community concerns and information needs concerning former Air Force Plant PJKS that arise during environmental response action activities.
- 4) Provide opportunities for community input and involvement by soliciting feedback when it can affect decisions.



**LEGEND**

-  Former Air Force Plant PJKS
-  Lockheed Martin Space Systems Company
-  Denver Metro Area
-  County Line

 <b>AIR FORCE CENTER FOR ENGINEERING AND THE ENVIRONMENT</b> BROOKS CITY-BASE, TEXAS	
<b>FORMER AIR FORCE PLANT PJKS</b>	
FIGURE NUMBER <b>1</b>	<b>PJKS LOCATION MAP</b>

 <b>Shaw Environmental, Inc.</b>		
PROJECT NO.	REV.	FILE NAME
132188.5300	1	132188B011

1		ISSUED TO AGENCIES				LH	TC	06/07/09	
REVISION	BY	DATE	DESCRIPTION	BY	DATE	CHKD	APPR	DATE	
0004	MEC	05/07/09	DRWAN	MEC	05/07/09	CHKD	LH	06/11/09	
							APPR	TC	
								06/11/09	

## SECTION 1 – OVERVIEW

### Site Description

PJKS is located in southern Jefferson County, Colorado, in the foothills of the Colorado Front Range, northwest of the town of Waterton and 25 miles southwest of the city of Denver. The property is approximately 5 miles south of Deer Creek Canyon Road and the junction of Highway 75 and S. Wadsworth Boulevard. PJKS is surrounded by approximately 4,700 acres of land owned by Lockheed Martin Astronautics Operations (LMAO) (see Map 2).

PJKS operated for 44 years as a government-owned, contractor-operated facility. The Air Force owned the 460 acres until February 2001, when ownership transferred to Lockheed Martin, the long-time operator of the facility.

PJKS played an important role in America's space and missile program. From activation in 1957 until the present, PJKS operations consisted of Titan I and II rocket and Titan III and IV launch-vehicle assembly, rocket engine testing, and rocket research and development. Fuels development, purification, and testing activities in support of the Titan III program were also conducted. Today, portions of PJKS are active operational areas including designing, developing, testing and manufacturing a variety of advanced technical systems for space and defense.

Cleanup began in 1984 in response to the Air Force's installation restoration program (IRP) presently referred to as environment restoration program (ERP). In November 1989, the U.S. Environmental Protection Agency (EPA) placed PJKS on the National Priority List (NPL). However, this site is not considered a Superfund site because Department of Defense facilities are funded for cleanup through the Environmental Restoration Account.

A Supplemental Remedial Investigation Report (18 volumes) was completed in 1999. The Air Force entered into a Compliance Order on Consent (No. 98-10-08-01) with the Colorado Department of Public Health and Environment on December 29, 1998. The document can be viewed in the Administrative Record in the Columbine Library as document number 07008. It is also online at: <http://edm-sepublic.daps.dla.mil/AESHAdmRec/>.

The Compliance Order on Consent grouped the cleanup into 56 sites called Solid Waste Management Units (SWMUs). Of the 56 PJKS solid waste management units, three are specific to groundwater and the remaining 53 are specific to soils. Seven areas with groundwater contaminant plumes were identified within the three groundwater solid waste management units. The two primary chemicals identified in these areas are: trichloroethylene (TCE) and N-Nitrosodimethylamine (NDMA).

The groundwater contamination source areas identified are:

- Ordnance Testing Laboratory Area plume (TCE source area)
- Systems and Components Area plume (TCE and NDMA source area)

- Engineering Propulsion Laboratory plume (TCE source area)
- T-8A Pump House plume (TCE and NDMA source area)
- D-1 Area plume (TCE and NDMA source area)
- D-4 Fuel Storage Area plume (TCE source area)
- Central Support Storage Area plume (TCE and NDMA source area)

The cleanup of sites at PJKS is geared toward meeting both Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) requirements. Cleanup also complies with State of Colorado Regulations, i.e, Colorado Hazardous Waste Act and the Colorado Water Quality Control Act. For more information on these acts, visit <http://www.cdphe.state.co.us/regulations/index.html>.

Most of the site contamination is from chlorinated organic cleaning solvents used to clean and degrease equipment. Some of the solvents spilled onto the ground or leaked from containment ponds or tanks and migrated to the groundwater. N-nitrosodimethylamine (NDMA), a component in the development of liquid rocket fuel, has contaminated groundwater. Other contamination is from the fuels used to test rockets at the site and to heat the buildings. Additional contaminants include Polychlorinated Biphenyls (PCBs), metals, etc. used in industrial processes over the years. Much of this suspected contamination resulted from accidental spills, runoff and from past waste disposal practices that, while in compliance at the time, do not meet today's more stringent standards.

## **Cleanup Progress**

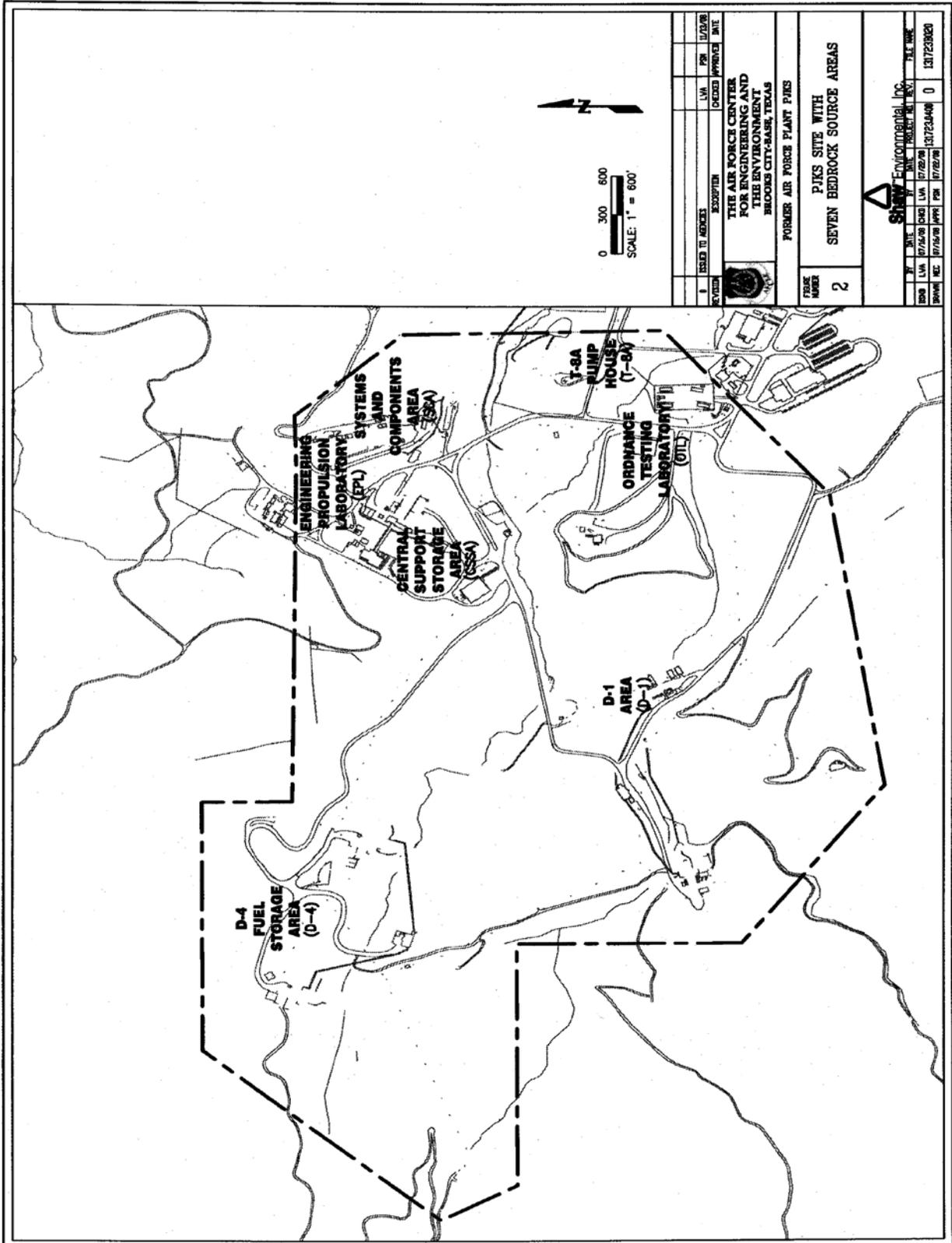
### ***Soils and Structures***

All 53 soil/solid waste management units have either been addressed and closed, achieved a "no further action" determination, or where contaminated soil must be left in place, have an environmental covenant being developed between Lockheed Martin (current land owner) and the state of Colorado.

### ***Groundwater***

The Air Force conducted a pilot study at the Engineering Propulsion Laboratory area to determine if bacteria could be injected into the groundwater and successfully break down trichloroethene (TCE) and NDMA. It worked well on the TCE but not on the NDMA. The pilot study was so successful for dissolving the TCE that it has become a groundwater Interim Corrective Measure (ICM).

A Feasibility Study report incorporates all of the bench scale studies, pilot studies, and interim corrective actions that have taken place at PJKS. These are evaluated for their effectiveness with the goal of selecting a treatment remedy/remedies. This report was submitted for regulatory review in June 2010. After approval, the Air Force will submit a Proposed Plan which will be made available for a public comment period targeted for the beginning of 2011. A Record of Decision follows the approved Proposed Plan.



MAP 2 - Map of the seven bedrock source areas.

## **SECTION 2 – DEMOGRAPHICS AND AREA DESCRIPTION**

Jefferson County (nicknamed Jeffco) is rich with wild, west history. It is known as the Gateway to the Rocky Mountains. Gold was discovered in 1859 near the confluence of Cherry Creek and the South Platte River prompting the “Pikes Peak” gold rush. The first newspaper, The Western Mountaineer, was published in Jefferson County in 1860. Colorado’s first railway company, the Colorado Central Railroad Company was started in Golden.

The current community is ranked as one of the most educated workforces in the county. Thirty-two percent of Jefferson County residents have a college degree, compared to the U.S. average of 24 percent according to the Jefferson Economic Council.

Jefferson County Public Schools are the largest in the state with 2008 enrollment of 85,478 students. Residents have a wide variety of educational choices - 93 elementary schools, 19 middle schools, and 17 high schools, 9 options schools and 12 charter schools. Good education is important to Jefferson County residents.

The Colorado School of Mines was established at Golden in 1870. Later in 1873, Coors Brewing Company was founded in Golden and continues to remain one of the larger employers in the county. Martin-Marietta Company, now Lockheed Martin, was established in 1955 and is still a major employer in Jeffco.

This community is growing and expanding into the wide open areas around the Lockheed Martin plant. Many new homes have been built since the community relations plan update in March 2003. Water is a concern to the public with droughts sometimes causing supplies to dwindle.

### **Nearby Communities**

In 1955, when the Martin Company, now Lockheed Martin, chose the rugged tract of land, it was a very isolated area. Even though the immediate surrounding area is still rural, recent residential development has encroached with one neighborhood, White Deer Valley, on the north border of the Lockheed property. A business, Colorado Golf and Turf, also borders the Lockheed property on the west border. Other neighborhoods are within less than a mile of the facility both in Jefferson County and northwestern Douglas County.

The next closest residential subdivisions are located from less than one mile to the north and 2 to 3 miles to the east and west and 4 miles to the southeast of PJKS boundaries. Deer Creek Mesa is located approximately 1-2 miles north of the PJKS site and comprised of approximately 36 homes. The primary water source for all residents originally was private wells. The Denver water system has been extended to this area, and to the best of our knowledge, homes are now on a municipal water supply system. One business near the facility, Colorado Golf and Turf, is on well water but does not use it for drinking purposes.

Some of the neighborhoods in the vicinity of the PJKS facility include:

- White Deer Valley bordering the LMAO facility fence line to the north consists of 52 lots;
- Deer Creek Mesa, 1-2 miles north of the plant;
- River Canyon/Ravenna about half a mile south of the plant across the Platte River and consisting of 249 units, an 18-hole golf course and clubhouse;
- Chatfield Farms about a mile east of the facility across the Platte River in Douglas County
- Roxborough Village in Douglas County about 3 miles east of the plant with 1,050 units;
- Trailmark of Chatfield about 6 miles north of the plant;
- Arrowhead Shores east of Roxborough Village consisting of 749 single family homes;
- Ravenna, a 243 home community and private golf club on 634 acres is being developed in Waterton Canyon.

Major public recreation areas are located nearby with Chatfield Reservoir less than 3 miles northeast. Also in the area are Roxborough State Park and Waterton Canyon. Lakewood and Littleton are the closest incorporated cities, with Littleton approximately 5 miles and Lakewood approximately 10 miles from PJKS property.

### **Population**

Jefferson County has a total population of 534,691, while unincorporated Jefferson County (South Jeffco) has a population of 204,715, according to the Jefferson Economic Council and the U. S. Census Bureau 2006. Jefferson County is the fourth most populous county in Colorado. There are thirteen incorporated communities within Jefferson County's 777 square miles.

The residents of Jefferson County are predominately white (93.1% - Census 2007 estimates) with an average age of 39.8 years according to the Colorado Division of Local Affairs, June 2003. The residents of Jefferson County earn a median household income of \$64,548 (2007) while South Jeffco has a median income of \$64,800. English is the primary language spoken.

### **Employment**

Jefferson County has a well-educated and diverse workforce with over 319,841 in its labor base, 306,183 employed and 13,183 unemployed according to the Colorado Department of Labor and Employment, 2007. Colorado is ranked high in the nation for the number of high-tech workers and high-tech job growth by the American Electronics and Nasdaq Stock Market.

The top employers in Jefferson County are listed below:

COMPANY	PROJECT/SERVICE	APPROXIMATE # JOBS
Jefferson County R-1 School	K-12 School District	12,000
Denver Federal Center	Federal Government Offices	6,200
Lockheed Martin	Aerospace & Defense Systems	5,500
Rocky Flats Environmental-Kaiser Hill	Waste Management/Cleanup	2,900
Jefferson County	Government	2,600
Exempla-Lutheran Medical Ctr	Medical Services	2,500
Coors Brewery Company	Beverage	1,950
Gambro Companies	Medical Tech/Health Care	1,720
King Soopers	Grocery Store	1,600
CoorsTek	Ceramic Component Manufacturers	1,200

**FIGURE 1. Employment chart.**

**Nearby Recreational and Natural Areas**

PJKS is within the South Platte River Basin which is drained by the South Platte River, which flows into Chatfield Reservoir and beyond. The South Platte River forms the Waterton Canyon just below and south of the facility and is a very popular recreation spot offering hiking, kayaking and mountain bike trails. Chatfield Reservoir was built by the Corps of Engineers to control flooding and is now used as a recreation facility and reserve water supply. It is 1500 acres in size and located south of Littleton by Colorado highway 470 (C470). Chatfield Reservoir (1,423 acres) and Chatfield State Park (3,895 acres), located to the east of PJKS, provide major recreation resources for 1.5 million visitors annually. The park was opened in 1975 and camping, boating, hiking, biking, horseback riding, bird watching and picnicking are available. The reservoir is more than 3 miles North of PJKS. The Chatfield Recreation Area also has a model airplane club and hot air balloon excursions.

The reservoir shoreline and the South Platte River and Plum Creek floodplains support large wetland, riparian and aquatic communities. Ponds and wetland habitats have been created at the southwestern edge of the park through a cooperative venture with the neighboring Lockheed Martin facility. Chatfield Wetlands, created with industrial wastewater purified in excess of most drinking water standards, has matured into one of Colorado’s premier examples of species diversity.

The South Platte Reservoir, located in Littleton, north of C-470 is now operational and serves as a storage site for surface water from the South Platte River. This water will be used by Highlands Ranch residents and area businesses.

## **SECTION 3 – HISTORY OF COMMUNITY INTEREST AND INVOLVEMENT**

The Air Force advertised for Restoration Advisory Board (RAB) members in December 1994 and began preliminary meetings April 1995. RABs bring together people who reflect the diverse interests within the local community, enabling the early and continued flow of information between the affected community, DoD and environmental oversight agencies. Meetings were held quarterly, and have dropped to semiannually because many of the project milestones have been attained and there is little new information to report. Meeting announcements are published in the Columbine Courier and the Council of Homeowners Organizations for Planned Environment (CoHope) newsletter and have periodically been posted online at YourHub.com. Announcements have always been mailed to persons listed on the PJKS mailing list.

In 1996 there were 10 original RAB members but since, membership has declined leaving 6 members on the RAB. Approximately 15-25 individuals attend the RAB meetings. Three to five of those attendees are RAB members. The meetings are held at the Columbine Library at 7706 W. Bowles Avenue in Littleton or at the Foothills Park and Recreating District at the Peak Center, 6612 S. Ward Street in Littleton.

### **Drinking Water**

Historically, community interest in PJKS has been at a minimum. A group of concerned citizens have asserted that either the Air Force or Lockheed Martin contaminated the groundwater processed by the Kassler Treatment Plant. The Kassler Treatment Plant operated to the southwest of the PJKS facility, along the South Platte River. Denver Water closed the facility in late 1985. Denver Water has always maintained that water from Kassler was never piped directly to the neighborhood in question where some persons believe an elevated cancer rate exists. They also question the Chatfield Reservoir being used as an emergency drinking water supply.

The Agency for Toxic Substances and Disease Registry conducted a Public Health Assessment for Air Force Plant PJKS and reported the findings March 29, 2000. The assessment evaluated whether there was an increase in cancer rates and other health problems in neighborhoods near the site. This document is in the administrative record and is number 8002. Studies showed incidence of childhood cancer, birth defects, fetal loss, neonatal deaths and low birth weights were within expected limits.

### **Private Wells**

In some areas of Jefferson County, residents get their water from private wells. Although most well water is of good quality according to Jefferson County Department of Health and Environment, December 2008, there are several contaminants, both naturally occurring and otherwise, which may affect the suitability of the water supply. The Jefferson County Department of Health and Environment recommends that well water be routinely tested for certain contaminants. No regulatory standards govern the quality of private well water.

The Colorado Department of Public Health and Environment sampled 11 private wells in the Deer Creek Mesa subdivision between February 28 and March 8 2001 in response to concerns by community members that there may be contaminants associated with historical industrial activities. The samples were analyzed for industrial compounds such as volatile organic compounds (solvents) and radionuclides. No volatile organic compounds were found at or above Safe Drinking Act maximum contaminant levels, or at or above laboratory reporting limits. Naturally occurring radionuclides were found at concentrations consistent with those found throughout the Denver and Colorado Front Range. No man-made radionuclides were found in the ground water. Residents were notified of results and given information on available home water filtration units by the Colorado Department of Public Health and Environment. A fact sheet, Deer Creek Mesa Well Sampling Revised August 2001, was distributed to interested parties by the Colorado Department of Public Health and Environment. Private wells are not regulated by the State of Colorado and private well owners are responsible for their own wells. For more information on private wells see: <http://www.cdphe.state.co.us/wq/drinkingwater/PrivateWellInformation.html>

Due to deposits of uranium and other minerals, radiation is a natural component of many groundwater supplies in Jefferson County. From a health standpoint, both uranium and radium-226 are the most important contaminants.

According to Denver Water, it has supplied fresh, safe water to its customers for almost ninety years. Chemists and biologists sample and test Denver's water every day to make sure it meets the highest state and federal standards for safety and quality. It is tested before it goes into the treatment plants, again after treatment, and 130 times more at sampling stations throughout the distribution system. Denver Water tests for TCE and NDMA and reports these chemicals are not detected. More information is available at [www.denverwater.org](http://www.denverwater.org).

### **NDMA**

During the April 2008 RAB meeting, the state health department chemist provided specific information explaining in detail the new detection method for NDMA. In the past, some RAB members compared Colorado's cleanup standard with California's stricter cleanup goals. The state health department's chemist believes the California labs think they are detecting NDMA at very low levels, but they aren't finding the confirming ion to confirm NDMA for certain. He explained the difference between screened data and definitive data. Definitive data can be used in court, whereas screened data cannot. This information was important to hear because some RAB members questioned why Colorado's cleanup goals were more lenient than California's.

## **SECTION 4 – COMMUNITY CONCERNS**

### **Background**

The original Community Involvement Plan was created in April 1993 with two updates in June 1998 and March 2003. It was originally called the Community Relations Plan and now called the Community Involvement Plan. The Air Force held interviews the week of March 30, 2009 with support from personnel of the Colorado Department of Public Health and Environment, U.S. Environmental Protection Agency and Shaw Environmental. Twenty-four people were interviewed from a wide array of community groups including residents, city and county officials, homeowners' association representatives, business owners, RAB members and past RAB members.

The goals of these interviews were to identify community interests and concerns regarding environmental activities at PJKS and to confirm how the public likes to receive information. The interview questions are listed as Appendix D.

### **Interviewees**

The participants were selected in accordance with CERCLA guidance and included: five RAB members; two former RAB members; elected officials of Jefferson County, Douglas County, and the City of Littleton; representatives of homeowner associations from neighborhoods near the facility; local environmental and advocate groups, state park representatives, and private citizens.

Not every interviewee responded to every question or in some cases gave multiple responses. Three of the interviews were conducted with groups: one group had five people, one group had four people and one group had two people. The others were individual interviews. During that week, 27 individuals were interviewed with 23 individuals comprising the vast majority of interviews conducted.

### **Highlights of the Community Interviews**

About 40 percent of those interviewed are long-term residents who lived in the area for over 20 years. One-third of those interviewed had no prior knowledge of the history of AFP PJKS but 72 percent were aware of the environmental cleanup. A number of respondents thought the entire cleanup was being conducted solely by Lockheed Martin and were not aware of Air Force involvement. About half of the respondents said they knew about the Restoration Advisory Board.

Some of the most common statements made during the interviews were:

- The information presented is too technical. We were asked by a number of people to keep information in simple English.
- The cleanup has taken a very long time to get to this point and cost a lot of taxpayer money.
- When will the cleanup be finished and how much has it cost to complete it?

Information needs by those interviewed centered on regular updates and the cleanup process. Thirteen respondents wanted regular updates on the status of the cleanup. Nine respondents asked for information on program basics, duration, and the background on the cleanup. Other information needs included:

- Annual expenditures/ funding (two respondents)
- Ecological impacts (one respondent)
- Information on water wells (one respondent)
- Potential impacts to state park operations (one respondent)
- Is it dangerous? (one respondent)
- What happens when the cleanup ends? (one respondent)
- Point of contact at project end (one respondent)
- When did Lockheed Martin set up the UV treatment system? (one respondent)

On the question of concerns about the environmental restoration of AFP PJKS, the majority (76 percent) had no concerns about the environmental restoration project.

- Three respondents felt not enough had been done to track down potential offsite contamination, particularly NDMA (both past and present), and were distrustful of the cleanup.
- Two respondents felt they did not have enough information to make judgment.
- One respondent said he was concerned about PCBs left onsite and would rather not have an Environmental Covenant.
- One respondent was concerned about disbanding the RAB.
- One respondent felt the task was too large for the state and for one project manager to handle.

On the question of the Record of Decision and ultimate RAB adjournment:

- Eight respondents had no objection or concern.
- Five respondents wanted to know if there were a mechanism in place should something come up, i.e., contaminant levels rise or new contamination is found. Will the Air Force return to continue cleanup work?
- One said it was ok to disband as the RAB doesn't help on the "tough stuff."

Other concerns were:

- Will there be continued updates and communication? (3 respondents)
- Will there be a "watchdog" and how long will monitoring continue? (4 respondents)
- How long until the project is ended and the RAB phased out? (3 respondents)
- Will there be full site cleanup or will something be left behind? (3 respondents)
- To make sure the Environmental Covenant is enforced (one respondent).
- Whether the Colorado Department of Public Health and Environment is up to the task (one respondent).
- Potential water quality issues with the Chatfield reservoir expansion (one respondent).
- What are the long-term effects (if any) on the aquifer? (one respondent)

Overall, there appears to be little change in the level of concern about AFP PJKS or the cleanup since the 2002 Community Involvement Plan. The lack of attendance at RAB meetings and the lack of public inquiries over the years from the general public seems to show that the public is either unaware or unconcerned despite 15 years of RAB meetings and other outreach activities by the Air Force. Only those individuals that have some form of contact with the site such as professionally, for personal reasons, living adjacent to the property, or having other close contact with the facility or the area around it --are interested in the cleanup.

Most individuals interviewed (78 percent) believe the Air Force had done a good job and/or a thorough job in the environmental restoration of PJKS. Perhaps the most notable change since the 2002 interviews is the number of people requesting information by email and internet links. Over half of the respondent said this was their preferred method of receiving information. Additionally, 10 individuals asked to be placed on the RAB mailing list. A few said they would like to attend the RAB meetings and one respondent said he would be interested in joining the RAB.

### ***Elected/Agency Officials***

A separate list of questions was asked of local elected officials and agency personnel to see what their constituents are saying about PJKS. Six individuals were interviewed including the Commissioners for Jefferson and Douglas counties, Denver Water, a member of Littleton City Council, Jefferson County Open Space, and Chatfield State Park.

Of these, only Denver Water has heard anything from the public concerning PJKS, and those inquiries are only from some RAB members and the Rocky Mountain Peace and Justice Center. The elected officials were aware of the cleanup and have access to information about it. However, no constituents have brought the topic to their attention. Jefferson County Open Space and the Chatfield State Park manager were unaware of the PJKS cleanup until they were contacted for an interview.

### ***RAB Members***

In general, most RAB members believed the public was not aware of PJKS or were ambivalent when they learned there was no health threat or that Lockheed Martin is involved, as many people trust Lockheed. One member said it was very complicated for the average person. Two members said it was hard to get their homeowner associations interested in the topic when they presented at the association meetings. Most members do not hear any concerns or questions about the site.

Of the five RAB members interviewed, four believe that public concerns are being addressed through the RAB. One member expressed distrust and dissatisfaction with the Air Force and the cleanup and felt the RAB was useless.

On the question concerning the RAB's role in the cleanup, one member said the RAB has had a useful role; two members felt the RAB has had a limited role--mainly for the distribution of

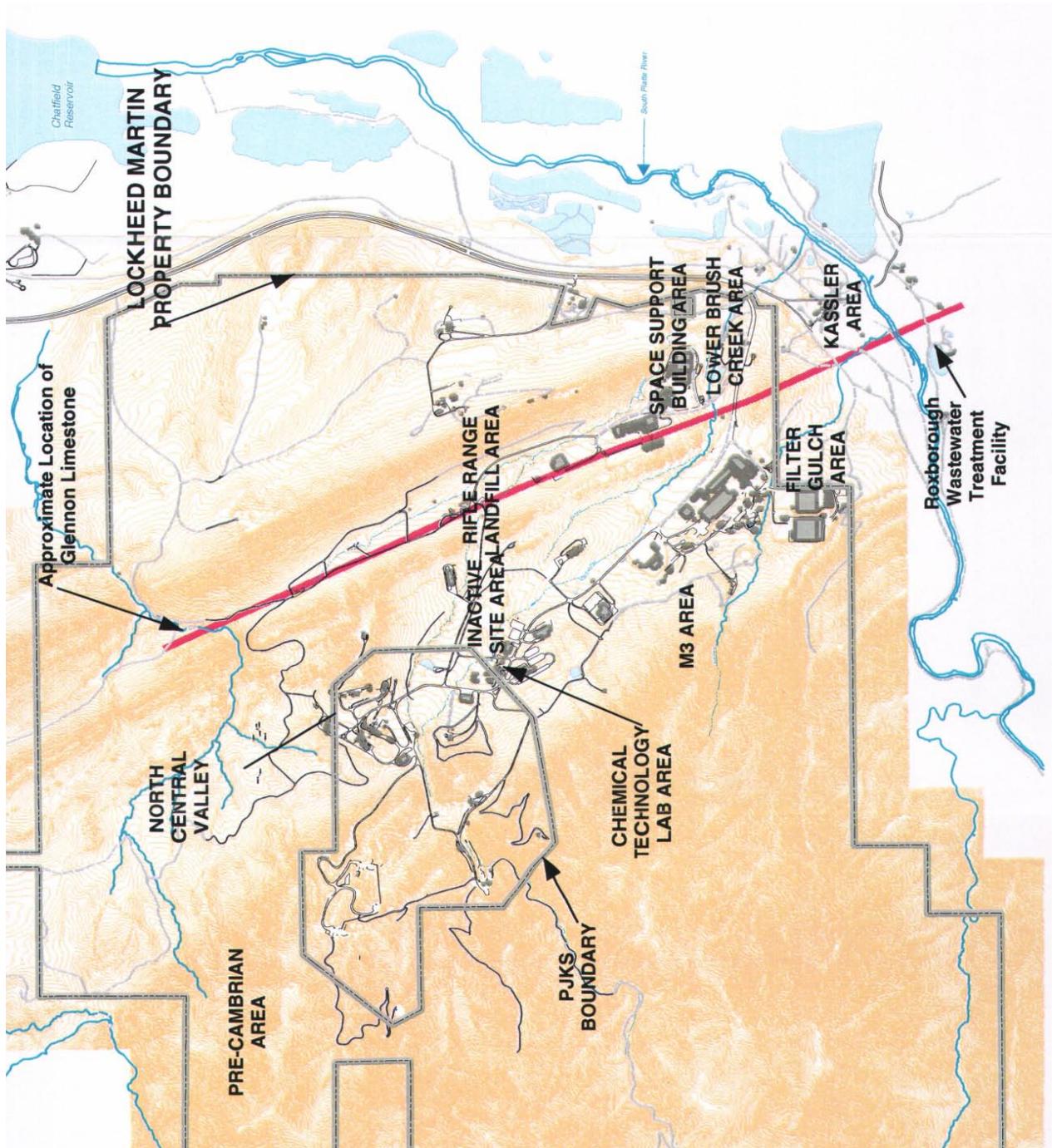
information or to ask questions-- but did not think the RAB had made much of a contribution. Two members said the RAB has not had a useful role in the cleanup process. On the question of the ROD and ultimate RAB adjournment, three members said this seemed appropriate, and one member did not think the Air Force would phase out of the cleanup. One member did not respond.

Restoration Advisory Board members, area residents and community leaders provide the cornerstone of this plan. Interviewees provided valuable information about their current understanding of the project, environmental and health concerns, and preferences for receiving site information and providing input.

### **New Issues Since the March 2003 Update**

- What will happen if there is a new emerging chemical of concern?
- If RAB is ended, how will future impacts be identified during the monitoring process and how would the AF address new issues.
- How will contaminate levels be addressed if they happen to rise above regulated parts per million?
- Will ongoing problems be thoroughly solved so there's no question of completion?
- What will the long-term effects on the aquifer be? Is there going to be a mechanism to reanalyze and restart (if necessary) the cleanup?
- What would happen if something new comes up after RAB closes.
- How do you make sure environmental covenants are enforced?
- How much has been spent to date?
- Any duplication of effort between the Air Force and Lockheed Martin?
- Lockheed Martin's administrative record disappeared from the library after ROD.
- Will the Chatfield Reservoir expansion impact any monitoring wells?
- Will the monitoring go on forever, and will it ensure that nothing is coming off of the property?
- Opposition of the Chatfield reallocation may bring up PJKS water quality issues.
- Didn't fully understand how Lockheed Martin fully captured everything off property. Probably spent more than needed to be overly protected.
- Concern – PJKS too big a job for one Colorado Department of Public Health and Environment project manager to handle
- How would they find out if something surfaces 5 years after RAB is adjourned?
- How will Chatfield Lake expansion affect PJKS?
- Is NDMA going under the filter beds and off site to Kassler and Chatfield or other places?
- Sometimes it is hard to see relevance of the presentations on separate subjects. How are they related – or not?
- Cost of cleanup and time taken to get to this point (Impression is in early stages, Lockheed Martin moved more quickly than Air Force. Air Force started, stopped, restarted. Some see it as a waste of time and money.)

- Wetland issue was more a water rights issue than water quality one. Wetlands around Chatfield Lake were allowed to dry up because Chatfield was not allowed to divert runoff from the Lockheed Martin property to the wetlands.
- Relative to Rocky Mountain Arsenal and Rocky Flats, this is small potatoes.
- Colorado Gulf and Turf property adjacent to Lockheed Martin's property line was previously owned by Union Carbide to make liquid nitrogen.
- English, English, English. Information is too technical. This was voiced by many people interviewed.
- If NDMA is going off site through the Glennon Limestone why won't anyone test offsite especially around the Kassler Water Plant. Who has authority to test?



This map shows the Glennon Limestone area depicted by the red line and is a new concern to several people since the previous Community Involvement Plan.

## SECTION 5 – GOALS OF THE PROGRAM

The former Air Force Plant PJKS site is not a widespread cleanup concern in the community. Most people are aware of the Lockheed Martin facility having their own cleanup program, but are unaware of the former Air Force owned property contained within Lockheed Martin's property. The cleanup program has been in existence since the mid 1990's and interest has dwindled.

The community involvement objectives continue to guide the community involvement activities throughout the Feasibility Study and Record of Decision phases of the program and are conducted in coordination with the Colorado Department of Public Health and Environments, the U.S Environmental Protection Agency, and Lockheed Martin Astronautics Operations. The following are the key goals of the community involvement program recommended in this revised plan:

- 1. Provide the community with information.** To keep the community apprised of environmental activities, the Air Force will disseminate information to those listed on the mailing list with post card announcements of meetings, RAB meeting minutes, fact sheets, press releases and news articles. The community will receive information on the results of sampling and any potential impacts to human health, and the schedule of planned activities during the final phases of cleanup.
- 2. Promote two-way communication between the Air Force and the community.** By promoting two-way communication, the Air Force is better able to maintain its awareness of community concerns. Part of this communication includes encouraging local officials and agencies, along with various county and city administrators and directors, to participate in community involvement activities. These community representatives will be informed of findings and developments to foster a cooperative effort.
- 3. Provide opportunities for citizen input and involvement.** In an effort to encourage citizen input and involve the community, the Air Force has encouraged the participation of local community groups, business owners, homeowner associations and environmental associations. Members of these groups provide a resource base for dissemination of PJKS information through their members. These involved citizens have the ability to reach a variety of interests in the region through their newsletters, membership program, mailing lists and other communication mechanisms. A list of Air Force contacts including a toll-free phone number is provided in Appendix A.
- 4. Respond to community concerns and needs that arise during IRP activities.** The Air Force will continue to respond to community concerns and needs by providing informational briefings, fact sheets, or training. When an issue relating to the PJKS restoration program is identified as a community concern, the issue may be placed on the next RAB meeting agenda and discussed. Issues not directly related to PJKS can be discussed in the open call after the

scheduled agenda items have been presented. Updates may be presented by the Colorado Department of Public Health and Environment or EPA during the call to regulators.

**5. Provide for effective management of the Community Involvement Plan and the community involvement program.** The Community Involvement Plan is a “living” document implemented upon coordination and approval by the regulatory agencies. It assures the community involvement program continues through the completion of environmental response action activities and site closeout. As the agency of primary responsibility, the Air Force is responsible for directing and implementing community involvement activities for the Environmental Restoration Program (ERP) at PJKS.

The Air Force is committed to developing cleanup strategies that support the Department of Defense (DoD) policy to reduce relative risk, prevent future contamination, achieve compliance, develop partnerships, involve stakeholders, evaluate cost and performance, comply with legal agreements and consider future land use.

## SECTION 6 – COMMUNITY INVOLVEMENT ACTIVITIES

This section of the Community Involvement Plan identifies activities and implementation techniques the Air Force currently uses or will use to fulfill community involvement objectives.

**Provide a Contact Point** – Judy Charles, Environmental Specialist in the Restoration Branch at Wright-Patterson Air Force Base will be the point of contact for community questions and/or concerns. Corey Lam is the Remedial Project Manager for PJKS and will address technical questions and concerns. Phone numbers and addresses are listed in Appendix A for personnel involved with PJKS cleanup.

**Maintain Information Repository and Administrative Record** - The information repository is a project file containing site information, documents on site activities and general information about the environmental response action activities at PJKS. It is located in the reference section of the Columbine Public Library at 7706 W. Bowles in Littleton (see Appendix B). The Administrative Record is a compilation of all environmental documents contributing to decisions made during the PJKS restoration process. All documents are on CD and online and some documents are available in paper copy in the same location as the repository listed above. The internet address for the administrative record should be typed in the browser line and is <http://edm-sepublic.daps.dla.mil/AESHAdmRec/>. Documents for public comment will be advertised in the paper and made available in paper form in the repository.

**Create, Maintain and Update a Community Mailing List** – The Air Force created and maintains a mailing list including local community members, community leaders, local officials, state and federal regulatory agencies, government offices, public interest groups and other interested or affected parties. Recipients will receive meeting announcements, fact sheets, RAB meeting notes and public notices. Anyone wishing to be added to or be removed from the PJKS mailing list should contact Judy Charles at 1-800-982-7248, extension 53593 or email at [judy.charles@wpafb.af.mil](mailto:judy.charles@wpafb.af.mil).

**Fact Sheets/Newsletters** – The Air Force, in coordination with regulatory agencies, will publish fact sheets at milestones to inform the public about environmental management and restoration activities underway at PJKS. Fact sheets will be mailed to all individuals on the community mailing list and filed in the information repositories and administrative record. Future factsheets may be required for the Proposed Plan (PP), Public Notice of Record of Decision (ROD), and Notice and Availability of Explanation of Significant Differences (if necessary).

**Public Comment Period** – The CERCLA process requires a public review period prior to the selection of a remedial action. A 30-day public comment period will be provided for review of the remedy selection documents, such as Removal Action Work Plans and Proposed Plans. Public comment periods will be announced via news releases, public notices and general mailings. Public comment periods may also be announced in fact sheets. During this time, the general public will have the opportunity to review and comment on the program's major

technical documents. The documents will be available at the information repositories and the administrative record location and online. Written comments will be accepted during the public period and during the public meeting.

**Presentations and Information Discussions** – Representatives are available to give presentations and hold informal discussions about the site investigations, remediation activities, or other environmental restoration program issues.

**Site Tours** – The Air Force has conducted several site tours (July 9, 1996 and July 23, 2003) for the RAB members to help them better understand the investigation and cleanup situation at the sites. A follow-up RAB site tour is scheduled for September 28, 2010 to show RAB members three groundwater source areas that will be addressed in the Record of Decision.

**APPENDIX A  
CONTACT POINTS**

<p><b>AIR FORCE (AF)</b> Mr. Corey Lam PJKS Remedial Program Manager ASC/ENVR 1801 Tenth Street, Ste 2 Wright-Patterson AFB OH 45433 Phone: 1-800-982-7248 ext 52970 <a href="mailto:corey.lam@wpafb.af.mil">corey.lam@wpafb.af.mil</a></p>	<p><b>COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT</b> Mr. David Walker Mail Code HMWMD-HWC-B2 4300 Cherry Creek Drive South Denver CO 80246-1530 Phone: 303-692-3354 <a href="mailto:david.walker@state.co.us">david.walker@state.co.us</a></p>
<p><b>US ENVIRONMENTAL PROTECTION AGENCY (EPA)</b> Mr. David Rathke US EPA Region 8, 8EPR-F 1595 Wynkoop Street Denver CO 80202-1129 Phone: 303-312-6016 <a href="mailto:Rathke.david@epamail.epa.gov">Rathke.david@epamail.epa.gov</a></p>	<p><b>SHAW ENVIRONMENTAL &amp; INFRASTRUCTURE, INC.</b> Mr. Thomas Cooper Shaw Environmental &amp; Infrastructure Group, Inc. 7604 Technology Way Denver CO 80237 Phone: 720-554-8163 <a href="mailto:Thomas.cooper@shawgrp.com">Thomas.cooper@shawgrp.com</a></p>
<p><b>US ENVIRONMENTAL PROTECTION AGENCY (EPA)</b> Ms. Jennifer Chergo US EPA Region 8, 8EPR-F 1595 Wynkoop Street Denver CO 80202-1129 Phone: 303-312-6601 Toll free: 1-800-227-8917 <a href="mailto:chergo.jennifer@epamail.epa.gov">chergo.jennifer@epamail.epa.gov</a></p>	<p><b>COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT</b> Ms. Jeannine Natterman Hazardous Materials &amp; Waste Management Division 4300 Cherry Creek Drive South Denver CO 80246 Phone: 303-692-3303 <a href="mailto:jeannine.natterman@state.co.us">jeannine.natterman@state.co.us</a></p>
<p><b>AIR FORCE</b> Ms. Judy Charles ASC/ENVR 1801 Tenth Street, Ste 2 Wright-Patterson AFB OH 45433 Phone: 1-800-982-7248 ext 53593 <a href="mailto:Judy.charles@wpafb.af.mil">Judy.charles@wpafb.af.mil</a></p>	<p><b>SHAW ENVIRONMENTAL &amp; INFRASTRUCTURE GROUP, INC.</b> Ms. Laura Newman Shaw Environmental &amp; Infrastructure Group, Inc. 7604 Technology Way Denver CO 80263 Phone: 720-554-8264 <a href="mailto:Laura.newman@shawgrp.com">Laura.newman@shawgrp.com</a></p>
<p><b>SHAW ENVIRONMENTAL &amp; INFRASTRUCTURE GROUP, INC.</b> Mr. Gregg McGraw Shaw Environmental &amp; Infrastructure Group, Inc. 5050 Section Avenue Cincinnati OH 45212 Phone: 513-782-4752 <a href="mailto:Greg.mcgraw@shawgrp.com">Greg.mcgraw@shawgrp.com</a></p>	<p><b>JEFFERSON COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT</b> Roy Laws 1801 19<sup>th</sup> Street Golden CO 80401-1798 Phone: (303) 271-5734 <a href="mailto:RLaws@co.jefferson.co.us">RLaws@co.jefferson.co.us</a></p>

<p><b>AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY (ATSDR)</b>  W. Mark Weber  1600 Clifton Road, E-56  Atlanta GA 30333  Phone (999 422-8737)</p>	<p><b>DENVER WATER</b>  Mr. Tom Mountfort  Denver Water Department  1600 W. 12<sup>th</sup> Avenue  Denver CO 80254  Phone: (303) 628-6342  <a href="mailto:Tom.mountfort@denverwater.org">Tom.mountfort@denverwater.org</a></p>
<p><b>LOCKHEED MARTIN</b>  Mr. Evan McCollum  Director, Communications  P.O. Box 179  Mail #1020  Denver CO 80201  Phone: 303-977-5364  <a href="mailto:Evan.d.mccollum@lmco.com">Evan.d.mccollum@lmco.com</a></p>	

## Elected Officials

<b>SENATE</b>	
<p>Michael Bennet 2300 15<sup>th</sup> Street, Ste 450 Denver CO (303) 455-7600 <a href="http://www.Bennet.senate.gov/contact/">www.Bennet.senate.gov/contact/</a></p>	<p>Mark Udall 999 18<sup>th</sup> Street Suite 1525, North Tower Denver CO 80202 (202) 224-5941 <a href="http://www.markudall.senate.gov/contact/contact.cfm">www.markudall.senate.gov/contact/contact.cfm</a></p>
<b>HOUSE OF REPRESENTATIVES</b>	
<p>Diana DeGette 600 Grant Street, Suite 202 Denver CO 80203 (303) 844-4988 <a href="http://degette.house.gov">degette.house.gov</a></p>	<p>Diana DeGette Washington D.C. Office 2335 Rayburn House Office Building Washington DC 20505 (202) 255-4431</p>
<b>ELECTED STATE OFFICIALS</b>	
<p><b>Governor</b> The Honorable Bill Ritter 136 State Capital Denver CO 80203-1792 (303) 866-2471 (phone) (303) 866-2003 (fax) <a href="mailto:bill.ritter@state.co.us">bill.ritter@state.co.us</a></p>	<p><b>Representative</b> Nancy Todd 200 E. Colfax Denver CO 80203 (303) 866-2919 <a href="mailto:nancy.todd.house@state.co.us">nancy.todd.house@state.co.us</a></p>
<p><b>Senator</b> Ken Gordon 200 East Colfax #263 Denver CO 80203 (303) 866-3341 <a href="mailto:ken@kengordon.com">ken@kengordon.com</a></p>	
<b>ELECTED LOCAL OFFICIALS</b>	
<p><b>Jefferson County Commissioners</b> Faye Griffin - District 1 J. Kevin McCasky - District 2 Kathy Hartman - District 3</p>	<p><b>Address for Jefferson County Commissioners:</b> 100 Jefferson County Parkway Golden CO 80419 (303) 271-8525 <a href="mailto:commish@jeffco.us">commish@jeffco.us</a></p>
<p><b>Douglas County Commissioners</b> Jack Hilbert – District 1 Steven Boand – District 2 Jill Repella – District 3</p>	<p><b>Address for Douglas County Commissioners:</b> 100 Third Street Castle Rock CO 80104 (303) 660-7401 <a href="mailto:bocc@douglas.co.us">bocc@douglas.co.us</a></p>

## MEDIA CONTACTS

TV STATIONS	RADIO STATIONS	NEWSPAPERS
<p>9News 500 Speer Blvd Denver CO 80203 303-871-9999 9News.com</p>	<p>KOSI 101.1 FM 303-631-2101</p> <p>KHOW 630 AM 303-713-8000</p>	<p>Denver Post 101 W. Colfax Avenue Denver CO 80202 303-954-1010 Denverpost.com</p>
<p>CBS4 1044 Lincoln Street Denver CO 80203 303-830-6464 Cbs4.com</p>	<p>KOA 850 AM 303-713-8000</p> <p>KCFR 90.1 FM 303-871-9191</p>	<p>Columbine Courier AJ Vicens 9719 W. Coal Mine Ave, Unit N Littleton CO 80123 303-933-2233 Columbinecourier.com</p>
<p>7 NEWS KMGH-TV 123 Speer Blvd Denver CO 80203-3417 303-832-7777 Thedenverchannel.com</p>	<p>KUVO 89.3 FM 303-480-9272</p> <p>KVOD 1280 FM 303-871-9191</p>	<p>Littleton Report 2255 West Berry Ave Littleton, CO 80165 303-795-3700 Bi-monthly out of City Mgr's, Jim Woods, office</p>
<p>KDVR Fox 31 100 E. Speer Blvd Denver CO 80203 303-595-3131</p>	<p>KYGO 98.5 FM 303 321-0950</p> <p>KIMN 100.3 FM 303-832-5665</p>	<p>Englewood Herald Highland Ranch Herald Littleton Independent The Voice Colorado Com- munity Newspapers 2329 W. Main St Littleton CO 80120 303-794-1606</p>
<p>KBDI Public TV 12 (PBS) 2900 Welton Street, 1<sup>st</sup> Floor Denver CO 80205 303-296-1212</p>	<p>KPOF 910 AM 303-428-0910</p> <p>KBPI 106.7 FM 303-713-8000</p>	<p>Douglas County News Press On-line newspaper <a href="http://www.dcnewspress.com">www.dcnewspress.com</a></p>
<p>Channel 6 KRMA TV (PBS) Rocky Mountain PBS 1089 Bannock Street Denver CO 80204 303-892-6666</p>		

## APPENDIX B INFORMATION REPOSITORIES

### A. Information Repository

Columbine Branch Library  
Jefferson County Public Libraries  
7706 W. Bowles Avenue  
Littleton OC 80123  
(303) 932-2690

Hours of Operation:  
Monday-Thursday 10-9  
Friday & Saturday 10-5  
Sunday 12-5

### B. Administrative Record

- 1) Columbine Branch Library  
Same as above  
Available on CDs
  
- 2) View online at <http://edm-sepublic.daps.dla.mil/AESHAdmRec/>
  
- 3) Paper copy and CDs  
U.S. Air Force  
Judy Charles  
ASC/ENVR B8  
1801 10<sup>th</sup> Street  
Wright-Patterson AFB OH 45433-7626  
(937) 255-3593  
Judy.charles@wpafb.af.mil
  
- 4) CDs  
Colorado Department of Public Health and Environment  
Hazardous Materials & Waste Management Division  
David Walker  
Mail Code HMWMD-HWC-B2  
4300 Cherry Creek Drive South  
Denver CO 80246-1530  
(303) 692-3354  
[dmwalker@cdphe.state.co.us](mailto:dmwalker@cdphe.state.co.us)

## **APPENDIX C LIST OF ACRONYMS**

AFP	Air Force Plant
AOC	area of concern
ASC	Aeronautical Systems Center
ATSDR	Agency for Toxic Substances and Disease Registry
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DERA	Defense Environmental Restoration Account
DERP	Defense Environmental Restoration Program
DoD	Department of Defense
EPA	U.S. Environmental Protection Agency
ERP	Environmental Restoration Program
FS	Feasibility Study
HSWA	Hazardous and Solid Waste Act
IRP	Installation Restoration Program
LMOA	Lockheed Martin Astronautics Operations
NCP	National Contingency Plan
NDMA	N-Nitrosodimethylamine
NFA	No Further Action
NPL	National Priorities List
PA	Preliminary Assessment
PA/SI	Preliminary Assessment/Site Inspection
PCB	polychlorinated biphenyl
PJKS	Peter J. Kiewitt and Sons
PP	Proposed Plan
RA	Remedial Action
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RI/FS	Remedial Investigation/Feasibility Study
RD	Remedial Design
RI	Remedial Investigation
ROD	Record of Decision
SARA	Superfund Amendment and Reauthorization Act
SI	Site Inspection
SWMU	Solid Waste Management Unit
TCE	Trichloroethylene
VOC	Volatile Organic Compound
WPAFB	Wright-Patterson Air Force Base

**APPENDIX D**  
**INTERVIEW QUESTIONNAIRE**  
**Plant PJKS Community Involvement Plan Update**  
**March 30, 2009**

Name of person interviewed \_\_\_\_\_

Organization representing \_\_\_\_\_

Date \_\_\_\_\_

***Conducted by Judy Charles, Air Force; Gregg McGraw, Shaw Infrastructure;  
Jeannine Natterman and Danny Lutz, CDPHE; and Jennifer Chergo, US EPA.***

- How long have you been living or working in this area? \_\_\_\_years \_\_\_\_months
- What do you know about the former Plant PJKS?
- Are you aware that Plant PJKS is involved in environmental cleanup activities? If yes, what do you know about those activities?
- Are you aware that there is a Restoration Advisory Board comprised of area residents and other entities dealing with environmental restoration issues?
- Are you on the mailing list to receive PJKS environmental cleanup information?
- What form of information is most useful to you? (Newsletter, fact sheet, meeting minutes, information repository, etc.)
- What type of information do you feel you need or want on the cleanup activities at Plant PJKS?
- Do you think it would be useful to provide environmental restoration information in a language other than English?
- The cleanup at PJKS is nearing the Record of Decision (ROD) phase. When the ROD is signed, PJKS will enter into long-term monitoring as most of the cleanup activities will be completed. At that time, the Air Force will phase out of the cleanup and the RAB will likely be adjourned. What impact do you think that will have? Do you have any concerns?
- The Air Force will continue to communicate with the local communities after the RAB adjourns. What form of communication would be best for you?
- Who would you contact if you have questions or concerns, or need information about Plant PJKS?
- Do you have any concerns about the environmental restoration of Plant PJKS?
- Do you know of any other groups or individuals you think we should contact for interviews concerning these activities at Plant PJKS? (Get names and phone numbers.)
- Is there anything else about Plant PJKS that you would like to comment on?

### **Elected/Agency Officials Addendum**

1. What questions/concerns have you received from the public concerning Plant PJKS?
2. What is your perception of the public's opinion toward Plant PJKS or the Air Force and its decision for conducting environmental cleanup actions?
3. Do you feel that public concerns are addressed in the cleanup process? If not, how might they be?
4. What types of people have you had contact with concerning Plant PJKS?
5. How do you keep the public informed and address their concerns about Plant PJKS?

### **RAB Members Addendum**

1. What questions/concerns have you received from others concerning Plant PJKS?
2. What is your perception of people's opinion toward Plant PJKS or the Air Force and its decision for conducting environmental cleanup actions?
3. Do you believe that public concerns are addressed in the cleanup process?
4. Do you think the RAB has had a useful role in the cleanup?
5. When the ROD is signed, PJKS will enter into long-term monitoring as most of the cleanup activities will be completed. At that time, the Air Force will phase out of the cleanup and the RAB will likely be adjourned. What are your thoughts on this?
6. Should it become necessary to reinstate the RAB, would you be willing to participate?
7. Do you know of any other groups or individuals you think we should contact for interviews concerning these activities at Plant PJKS? (Get names and phone numbers.)
8. Is there anything else about Plant PJKS that you would like to comment on?

**INTERVIEW ANALYSIS**  
**Plant PJKS Community Involvement Plan Update**  
**September 14, 2009**

**Note:** Not every interviewee responded to every question or in some cases gave multiple answers. This accounts for the discrepancies in totals. We interviewed 27 individuals with 23 individuals making up the main number of interviews. There was one group of 5, one of 4 and one group of 2. The rest were individual interviews.

1. How long have you been living or working in this area? \_\_\_\_\_years \_\_\_\_\_months

**0-10 years: 7**  
**11-20 years: 7**  
**21-30 years: 8**  
**30+ years: 1**

2. What do you know about the former Plant PJKS?

**Very Aware: 11**  
**Some Knowledge: 3**  
**Little Knowledge: 2**  
**Nothing: 8**

3. Are you aware that Plant PJKS is involved in environmental cleanup activities? If yes, what do you know about those activities?

**Aware: 18**  
**Not aware: 7**

**Knowledge level:**  
**A Lot: 8**  
**Some: 4**  
**Little: 5**  
**Nothing: 8**

4. Are you aware that there is a Restoration Advisory Board comprised of area residents and other entities dealing with environmental restoration issues?

**Yes: 13**  
**No: 12**

5. Are you on the mailing list to receive PJKS environmental cleanup information?

**Yes: 10**  
**No: 16**  
**Asked to be added to mailing list: 10**  
**Preference:**  
**Mail: 5**  
**Email: 5**  
**One individual indicated he would be interested in joining RAB.**

6. What form of information is most useful to you? (Newsletter, fact sheet, meeting minutes, information repository, etc.)

**Newsletter: 3**  
**Fact sheet: 10**  
**Meeting minutes: 9**

**Information Repository: 2**

**Website: 1**

**Meetings: 1**

**Mail: 4**

**Email: 6**

**With Internet Links: 11**

**One individual said “written, maps.” This has been counted as a fact sheet and minutes.**

7. What type of information do you feel you need or want on the cleanup activities at Plant PJKS?

**Regular Updates: 1**

**Expected Completion Date: 1**

**Progress: 1**

**Annual Expenditures: 1**

**What is going on: 1**

**Funding: 1**

**Cleanup Process: 1**

**Event driven communication, not calendar driven: 1**

**Info on water wells: 1**

**Info contained in newsletters if fine: 2**

**What prompted cleanup: 1**

**Where are we in the process: 1**

**Cleanup goals: 1**

**What we have covered so far-technical and non-technical: 1**

**Where are we in cleanup: 1**

**Ecological impacts: 1**

**Status: 3**

**Media relation problems that arise: 1**

**Impacts to state park operations: 1**

**Updates: 1**

**When will it be 100% done: 1**

**What happens then: 1**

**Cleanup program basics: 1**

**How dangerous is it: 1**

**Is cleanup getting done: 1**

**Duration: 5**

**POC at termination: 5**

**What is being done and why: 2**

**When did LM set up UV treatment: 1**

**Note: we have an offer to use the Chatfield Basin Conservation Network email list to distribute information.**

8. Do you think it would be useful to provide environmental restoration information in a language other than English?

**Yes: 1**

**No: 22**

**Comments were “use simple English”, “technical terms are already in a different language”, “no foreign speakers around plant.”**

9. The cleanup at PJKS is nearing the Record of Decision phase. When the ROD is signed, PJKS will enter into long-term monitoring as most of the cleanup activities will be completed. At that time, the Air Force will phase out of the cleanup and the RAB will likely be adjourned. What impact do you think that will have? Do you have any concerns?

- As long as people are kept informed – ok: 1**
- What if something comes up, what happens then: 1**
- Make sure Environmental Covenant is enforced. : 1**
- No impact and no concern: 8**
- What if contaminant levels rise, will AF return: 1**
- How far out in future is project phase out: 1**
- Depends on how phase-out is handled-how will RAB feel being disbanded: 1**
- Will ongoing problems be solved?**
- Is there a mechanism to restart the cleanup: 1**
- What are the long term effects on the aquifer: 1**
- How long will monitoring continue?**
- Concerned there won't be a “watchdog” (RAB) and communication will stop: 1**
- Will there be full site cleanup or will something be left?**
- Water quality issues with Chatfield reallocation: 1**
- What happens if rediscovery of contamination: 1**
- Will there be continued updates: 2**
- Not a lot of information available, assume it is ok if no outcry from RAB: 1**
- Ok if still under consent Order: 1**
- May receive more visits and questions about water quality that would have been handled at RAB: 1**
- Concerned about no recourse if something happens: 1**
- Will we be notified about public comment period: 1**
- Didn't uncover cleanup info during title search: 1**
- Will RAB close before the ROD: 1**
- Ok, RAB doesn't help on the tough stuff: 2**

**Comments: there are non-point source and water temperature issues that are real concerns. No need to “scare people over PJKS, save alarms for real concerns.”**

10. The Air Force will continue to communicate with the local communities after the RAB adjourns. What form of communication would be best for you?

- Written: 4**
- Newspapers: 2**
- Website: 1**
- Newsletters: 6**
- Fact sheets: 1**
- Annual Report: 1**
- Send to HOA for dissemination: 1**
- Include contact name and number: 2**
- Mail: 6**
- Email: 8**

11. Who would you contact if you have questions or concerns, or need information about Plant PJKS?

**Judy Charles: 5**  
**Lockheed Martin: 3**  
**CDPHE (J. Natterman): 4**  
**CDPHE (D. Walker): 2**  
**RAB Co-chair (D. Suchomel): 2**  
**EPA: 1**  
**Air Force: 1**  
**Local Health Dept.: 1**  
**Roy Laws: 1**  
**Ann Bonnell: 1**  
**Joan Jacobsen: 3**  
**Don't know: 2**

**After RAB ends, did not know: 1**

**One respondent would refer to minutes for contact names.**

12. Do you have any concerns about the environmental restoration of Plant PJKS?

**Yes: 6**  
**No: 13**  
**Not at moment/Wait and see: 1**  
**Doesn't know enough: 1**

**Comments:**

**What about NDMA?**

**What has happened due to offsite contamination.**

**Leave land as original.**

**Air Force has done a great job.**

**PCBs that were asphalted over-would rather no have an Environmental Covenant.**

**Nervous about the RAB disbanding.**

**What is process for addressing new issues (if any).**

**Too big a job for the state and for one person, Dave Walker.**

**Doesn't fully understand how Lockheed Martin can capture everything going off property.**

13. Do you know of any other groups or individuals you think we should contact for interviews concerning these activities at Plant PJKS? (Get names and phone numbers.)

**Yes: 14**  
**No: 6**

14. Is there anything else about Plant PJKS that you would like to comment on?

**There were various comments to this question. These included:**

- **How do Air Force and Lockheed Martin interact on cleanup issues?**
- **What is current RAB meeting schedule (thought an annual meeting was sufficient).**
- **Question about dried up wetlands at Chatfield, is this due to runoff from Lockheed Martin?**
- **Thought project was progressing well, now.**
- **Did a good job keeping this from becoming an issue.**

- Question on ownership of well on Golf and Turf property.
- Any reason to be concerned about health of Lockheed Martin employees? Especially long-term employees?
- Why is the state sitting in on the interviews and not the local health department?
- Question on contact of South Jeffco Open Space. Was there prior contact regarding cleanup? First time they heard of this. Had recently been contacted by Lockheed Martin concerning possible property transfer.
- RAB meeting indicated how thorough the cleanup is.
- Very pleased.
- Done a remarkably good job – tours, feedback, outreach.
- How much has been spent to date? Duplication of effort, change in direction. . .

### Elected/Agency Officials Addendum

Interviewed six elected or agency personnel.

1. What questions/concerns have you received from the public concerning Plant PJKS?
  - Is Denver’s source water impacted by NDMA and chlorinated solvents and how do we know it isn’t?
  - None.
  - None.
  - None.
  - Have not received any.
  - None.
2. What is your perception of the public’s opinion toward Plant PJKS or the Air Force and its decision for conducting environmental cleanup actions?
  - The public is informed and most of the RAB responds positively.
  - They are either unaware or satisfied. People in the area are an intelligent community that pays attention.
  - Unknown.
  - Either content or unaware. If not content, I am not aware of it.
  - Can’t give an opinion, unknown.
  - Unconcerned or unaware.
3. Do you feel that public concerns are addressed in the cleanup process?
  - 3A. If not, how might they be?
    - Yes.
    - They must be, I haven’t seen anything in the media.
    - Sounds like we are.
    - Assume they have been, after two years I haven’t heard a word about it.
    - As a guess, some.
    - Yes.
4. What types of people have you had contact with concerning Plant PJKS?
  - Rocky Mountain Peace and Justice Center and RAB members and nobody else.
  - None.
  - None.
  - None.
  - None.

- **None. A few engineers bring it up in conversation but believe they don't have to worry about it.**
5. How do you keep the public informed and address their concerns about Plant PJKS?
- **Denver Water is completely reactive; we don't get much public comment. We address concerns as they come. Denver Water could provide sampling information to the RAB, that may alleviate a lot of citizen's concerns.**
  - **If asked, we have a monthly meeting in Roxborough, and quarterly water district meeting.**
  - **That is not in our area of responsibility.**
  - **I won't start getting involved until I hear of concerned citizens. I have other things I need to keep them informed about.**
  - **No answer.**
  - **None to date. Can address it at the city council meeting.**

### **RAB Members Addendum**

Interviewed five RAB members plus two former RAB members.

1. What questions/concerns have you received from others concerning Plant PJKS?
- **None.**
  - **Most people don't know it is going on.**
  - **Only on the speed of it, moving very slowly, especially at start up. Had several startups over the years. Questioned the competency of it. Thought heavy metals and TCE were problem at the beginning.**
  - **Is it dangerous, how is it going, what are they doing up there?**
  - **NDMA is the big thing.**
2. What is your perception of people's opinion toward Plant PJKS or the Air Force and its decision for conducting environmental cleanup actions?
- **Not many people know it is there and others, when hearing Lockheed Martin, trust them.**
  - **Most people don't know it is going on.**
  - **Not many people know about it. Plus it is very complicated for average person.**
  - **Most people ambivalent when they learn there is no threat to their health.**
  - **It is a joke, they don't trust us. Especially when NDMA came out. Ms. Anderson sent a letter two years before Glennon Limestone and nothing was done.**
3. Do you believe that public concerns are addressed in the cleanup process?
- **Yes, through RAB.**
  - **Yes.**
  - **Yes.**
  - **Yes. The limestone issue caused a stir but was pleased to see LM acted quickly.**
  - **As far as the RAB goes, but outside the RAB it's not very good.**
    - **Felt RAB was useless. There was more concern for the Preble Mouse than for the dead babies in Friendly Hills.**
    - **There are a few people controlling the RAB very tightly and they shut down others.**

4. Do you think the RAB has had a useful role in the cleanup?
  - **Useful for dissemination of information. Not sure about the contribution to the process.**
  - **Yes.**
  - **No, the RAB can only ask questions. They can't see where the direction has changed or process changed. That is not what RAB is for; they are chartered for communication and dissemination.**
  - **Yes, for distributing useful information and as a place for people to come and vent. Historically there seemed to be larger issues than now.**
  - **No, absolutely not.**
  
5. When the ROD is signed, PJKS will enter into long-term monitoring as most of the cleanup activities will be completed. At that time, the Air Force will phase out of the cleanup and the RAB will likely be adjourned. What are your thoughts on this?
  - **Seems to be standard after ROD is signed. When Lockheed Martin signed their ROD their AR documents were removed from the library.**
  - **No Ans.**
  - **Thinks this is entirely appropriate. Hopes CDPHE has resources to do what they are supposed to do.**
  - **If no activity, don't see the point in paying for an ongoing RAB.**
  - **Did not think Air Force would phase out of cleanup. Depends on what comes out.**
  
6. Should it become necessary to reinstate the RAB, would you be willing to participate?
  - **Yes.**
  - **Yes.**
  - **Yes.**
  - **Sure.**
  - **Did not know, probably not.**
  
7. Do you know of any other groups or individuals you think we should contact for interviews concerning these activities at Plant PJKS? (Get names and phone numbers.)
  - **Already provided them.**
  - **No response.**
  - **No.**
  - **No response.**
  - **No response**
  
8. Is there anything else about Plant PJKS that you would like to comment on?
  - **Can the Chatfield expansion impact PJKS, monitoring wells?**
  - **Too bad AF didn't act on TCE plume right away. Lead to more testing, costs more taxpayer money. AF should have reacted as quickly as LM.**
  - **No.**
  - **Not really, seems to be progressing well. No suggestions for improving the RAB.**
  - **NDMA Issue.**