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COUNTY OF SACRAMENTO
CALIFORNIA

For the Agenda Of
June 4, 1991

To: County Board of Supervisors

From: R. Dee Reynolds
Assistant to the County Executive

Subject: STATUS REPORT - SACRAMENTO CITY AND COUNTY
BASE REALIGNMENT STUDY COMMITTEE

1. The Chair of the Base Realignment and Closure Commission, Jim Courter, will visit the Army Depot, Sunday June 2, 1991. Details of this visit will be forthcoming.
2. The Closure Commission has called for validation of assumptions regarding cost savings and military construction costs. See Exhibit A attached.
3. Two substantial issues regarding the toxic clean-up of contaminated sites at bases have arisen in recent weeks.

On May 10, it was reported by Pentagon officials in Washington that it is possible current law could forbid the reuse of uncontaminated areas of a military base that are on the Federal Superfund list until the entire base is deemed "clean". If this interpretation of the law is correct and no legislation passes changing the law, it is possible that no reuse could take place until the entire area is clean.

Representatives Fazio and Ray of Georgia have introduced legislation which would allow the sale or transfer of uncontaminated portions of the base before clean-up is completed.

Respectfully submitted,



R. DEE REYNOLDS
Assistant to the County Executive

Attachment: Exhibit A

Exhibit A

Several cost analyses have been performed by the military services on DoD Communications-Electronics (C-E) workload transfer initiatives. However, the fact that several studies have been accomplished has led to questions regarding the credibility of the savings and costs of base closure and workload transfer depicted by those reports. Even when the workload transfer scenarios described by these studies have been the same, the costs and savings data has been significantly different.

This analysis provides an explanation of the costs and savings associated with implementing the Sacramento Plan in establishing East and West Coast C-E Depots, as set forth in Figure 7 of that plan. The data has been extended to show six year costs and savings for comparison with the Army input to the BRAC Commission.

SAVINGS

Overhead: \$126.0M. These savings accrue as a result of the economies of scale involved in a consolidation of like C-E workloads.

Whereas all direct labor personnel would transfer from the losing organizations, only 70 percent of overhead personnel would transfer.

To determine personnel savings, the average salary was computed at \$33K per year per employee and an additional 18 percent was added to cover government-provided benefits. The savings were calculated based on phased workload transfers and consolidated in Figure 8.

Base Operations Support: \$55.1M. As in overhead savings, significant savings will occur in Base Operations Support (BOS) costs. The current BOS contract at SAAD will be incrementally reduced and eliminated as the workload moves and SAAD is closed (100 percent savings over present costs).

Total Savings: \$181.1M (over six years). The savings elements associated with a C-E consolidation were analyzed as conservatively and reasonably as possible, using the above two factors.

COSTS

Teardown, Reassembly and Test of Equipment: \$14.9M. These costs accrue over the implementation period of the Sacramento Plan and involve the movement of C-E industrial equipment.

Certain test equipment must be disassembled prior to transport. Equally they must be reassembled on arrival and calibrated or tested for accuracy. Generally, the technicians utilizing this equipment on a daily basis are capable of performing these functions; their salaries are factored into this cost element.

Facility: \$4.1M. Closing SAAD and consolidating its workload at East and West Coast facilities will incur facility costs. Of the total, \$1.1M is devoted to facility close down costs at SAAD. The remaining \$3.0M is for upgrade of McClellan AFB Bldg. 628 to accept the Electro-Optics

function and its associated clean-room requirements.

Shipping: \$.65M. In essence, this is the cost to move the DoD C-E depot maintenance support equipment, as described in the proposal, to Tobyhanna Army Depot (TOAD) - East Coast) and Sacramento Air Logistics Center (SM-ALC - West Coast). The cost was based on cube and weight estimates of equipment at SAAD and applied, on a pro rata basis, to other C-E depots. This cost presents minimal risk.

Personnel: \$.82M. Reductions will be handled through normal attrition and no severance or retraining will be needed.

The small number of employees involved in Navy and Marine Corps workload transfers and the plan to perform the transfers incrementally, also permits normal attrition to eliminate excess overhead positions and negates the need to expend severance and retraining funds. For example, a conservative five percent attrition rate per year, multiplied by the base population at each location will readily accommodate the draw down without resorting to involuntary separations.

Although some recruitment, hiring and training will be needed at both SM-ALC and TOAD, the expense is considered to be minimal and, again, due to the incremental transfer of workloads which will be spread over a manageable time frame.

Travel: \$.2M. Site/equipment surveys by receiving depots of the losing organization will be required to examine equipment and facility requirements needed to host the transfer workloads.

The cost needed to perform site/equipment survey trips were estimated based on an average of four trips for each move, using three person teams, at a cost of \$2000 per person per trip. No travel expenditure will be needed for the SAAD to SM-ALC moves. Thus, a total of 36 site/equipment surveys will be required. The computation is as follows: $36 \times 3 \times \$2000 = \$216K$.

Total Cost to Implement the Sacramento Plan: \$20.6M over the first three years of the six year implementation period.

NET SAVINGS: \$160.5M (first six years).

Significant DoD cost savings, approximately \$34M per FY beginning in FY96, would be realized by implementing this proposal. Moreover, \$9.2M accrue in the first year of implementation; in other words, savings accrue to DoD and the taxpayers immediately.

One time costs are significantly reduced over those incurred in other 1990 proposals. Savings are greater than those presented in other proposals. Mission degradations are reduced due to maintaining the skilled work force and minimizing 'down time' with incremental, and in most instances shorter moves.

This consolidation will enhance DoD's ability to compete with the private sector for C-E workload. The two Repair Centers would compete on a more level playing field given their streamlined and consolidated overhead and BOS functions.

In summary, benefits of the Sacramento Plan are:

One time costs for personnel transfers, recruitment, training and retraining are lower than other proposals.

Facility improvements and new construction are minimized.

Equipment transfers are minimized as well, primarily due to the nine mile separation of SM-ALC and SAAD.

Personnel disruption is considerably less than the other proposal.

This proposal avoids many of the adverse political, environmental and socio-economic impacts inherent in the other alternative being considered. It is supported by a cross section of the Sacramento Metropolitan area. Civic leaders, the area's Congressional delegation, business and industry leaders and local citizenry all recognize the importance of achieving savings while preserving the strategic repair capabilities of the DoD. This proposal accomplishes these goals without creating serious damage to any community's economy.

BRACS4:CONGRESS

ECONOMIC ANALYSIS

NET SAVINGS

	<u>FY 93</u>	<u>FY 94</u>	<u>FY 95</u>	<u>FY 96</u>	<u>FY 97</u>	<u>FY 98</u>	<u>TOTAL</u>
SAVINGS							
OVERHEAD	12.14	17.94	23.98	23.98	23.98	23.98	126.00
BASE OPS SUPP	7.37	7.37	10.10	10.10	10.10	10.10	55.14
<i>SUB TOTAL</i>	<u>19.51</u>	<u>25.31</u>	<u>34.08</u>	<u>34.08</u>	<u>34.08</u>	<u>34.08</u>	<u>181.14</u>
COST							
TEARDOWN REASSEMBLY & TEST	7.54	3.61	3.75	0	0	0	14.90
FACILITY	2.05	1.78	.27	0	0	0	4.1
SHIPPING	.23	.27	.15	0	0	0	.65
PERSONNEL	.26	.27	.15	0	0	0	.82
TDY	.22	0	0	0	0	0	.22
<i>SUB TOTAL</i>	<u>10.30</u>	<u>6.04</u>	<u>4.35</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>20.69</u>
NET SAVINGS	<u>9.21</u>	<u>19.27</u>	<u>29.73</u>	<u>34.08</u>	<u>34.08</u>	<u>34.08</u>	<u>160.45</u>

\$ IN MILLIONS

COMMUNITY IMPACTS OF THE SACRAMENTO PLAN

<u>COMMUNITY</u>	<u>PERMANENT BASE POPULATION</u>	<u>IMPACT OF SACTO PLAN</u>	<u>% IMPACT</u>
1. Sacramento, CA (SM-ALC/SAAD)	18,542	-336	-1.81
2. Tobyhanna, PA (TOAD)	3,825	+573	+14.98
3. Albany, GA (USMC-ALB)	4,200	-409	-9.73
4. Barstow, CA (USMC-BAR)	2,427	-383	-15.78
5. Pensacola, FL (NAD-PEN)	22,896	-16	-0.07
6. Jacksonville, FL (NAD-JA)	17,184	-2	-0.01
7. Norfolk, VA (NAD-NOR)	21,900	-8	-0.04
8. San Diego, CA (NES-SD)	45,769	-31	-0.07
9. Portsmouth, NJ (NES-POR)	468	-4	-0.86
<hr/>			
TOTALS	193,431	-616	-0.46

COUNTY OF SACRAMENTO
CALIFORNIA

For The Agenda Of:
June 4, 1991

To: County Board of Supervisors
Sacramento City Council

From: R. Dee Reynolds
Assistant to the County Executive

Subject: STATUS REPORT FOR MATHER INTERNAL STUDY TEAM

- A. Sacramento City/County Military Installation Employee Assistance Task Force is seeking the endorsement from the Private Industry Council and Sacramento Employment and Training Agency (SETA) for a proposal to the State of California for funding for dislocated workers. The Metropolitan Chamber of Commerce has endorsed this proposal.

Representatives from SETA are in continuous contact with the the civilian personnel office at Mather Air Force Base (AFB).

- B. The attached report contains recommendations relative to economic analysis and noise contours as well as a discussion of environmental concerns at Mather AFB.

Respectfully submitted,



R. DEE REYNOLDS
Assistant to the County Executive

PLM:cj (afa15013)

Attachments: ERA contract
EPA/Air Force toxics paper
Department of Airports noise contours

COUNTY OF SACRAMENTO
CALIFORNIA

For The Agenda Of:
June 4, 1991

To: Board of Supervisors

From: R. Dee Reynolds
Mather Interim Study Team

Subject: ECONOMIC CONSULTANT SELECTION, REVIEW OF ENVIRONMENTAL AND TOXIC
ISSUES, AND AIRPORT NOISE CONTOUR FOR MATHER AIR FORCE BASE

RECOMMENDATIONS:

1. Approve the selection of Economics Research Associates to perform the economic analysis for the aviation and non-aviation options, adopt the attached resolution authorizing the Chairman to execute an agreement with Economics Research Associates for the consulting services.
2. Direct staff to transmit the attached noise contour provided by the Department of Airports that has the concurrence of the Rancho Cordova Chamber of Commerce to the Environmental Impact Survey (EIS) contractor and to Economics Research Associates for inclusion in their studies.

DISCUSSION:

Since your Board last discussed the Mather reuse project on May 2, three issues have arisen which your Board should be made aware. These issues are:

- the staff recommendation for selection of a consultant for the economic analysis;
- additional information regarding toxics at Mather and the impact on base reuse; and,
- additional information regarding the noise contours based upon further modeling and new data from the Department of Airports.

This report will address these three issues in some detail. The updated reports on toxic presence on base requires no Board action at this time and is provided only for your information. The selection of the economic consultant and endorsement of a modified noise contour requires Board ratification of the staff recommendation.

SELECTION OF ECONOMIC CONSULTANT:

On April 10, 1991, a Request for Proposal (RFP) for an economic and fiscal analysis comparing aviation and non-aviation options was sent out to 27 economic consulting firms. On April 22, a public notice of the RFP was published in both the Sacramento Union and the Sacramento Bee. On May 1, an open pre-bid

ECONOMIC CONSULTANT SELECTION, REVIEW OF ENVIRONMENTAL AND TOXIC
ISSUES, AND AIRPORT NOISE CONTOUR FOR MATHER AIR FORCE BASE

Page 2

conference was held to discuss the RFP in which ten interested firms attended. Finally, on May 10, the County received six proposals.

These proposals were immediately distributed to the Executive Committee of the Internal Study Team for their review (each Board member and the Rancho Cordova Chamber of Commerce were also sent copies). Attached to the proposals was a form listing a variety of criteria by which each proposal was to be ranked by reviewers. These criteria included:

- the qualifications of the firm;
- a review of the proposed work plan;
- the unique characteristics of the proposal;
- a review of past sample work products; and,
- cost.

For each of these areas, a numerical scoring system was developed, and each proposal was ranked accordingly. The group then met on May 22 to compare the relative scores of the proposals. At this meeting, it was decided that three firms would be interviewed. On May 28, the interviews were held and immediately thereafter the group unanimously decided upon its recommendation.

Based upon the ranking of each proposal, the information in the interviews, and detailed discussion among Executive Committee members, it is recommended that your Board approve the selection of Economic Research Associates (ERA) and adopt the attached resolution authorizing the Chairman to sign an agreement so that work can begin immediately.

While all of the proposals were of high quality, and all the firms should be congratulated for their excellent proposals, Economic Research Associate's proposal was, in the opinion of the Internal Study Team, superior. The team has great confidence that ERA will perform the work in conformance with the requirements of the RFP, and in some cases go beyond what was asked, for a total fixed price of \$92,000. While this was not the lowest cost proposal, it was unanimously felt by the Executive Committee that their proposal was by far the most comprehensive and cost-effective of those presented.

The consultant firm, at its own risk, has already begun work collecting relevant data and will be able to issue a final report comparing the different aviation and non-aviation options on August 1 as called for in the RFP. This should enable your Board to have detailed financial information on the consequences of choosing different options.

As work commences and relevant information is ascertained, your Board will be informed.

TOXIC CLEAN-UP AND ENVIRONMENTAL CONCERNS:

Two substantial issues regarding the toxic clean-up of contaminated sites at Mather have arisen in recent weeks. Listed briefly below is a summary of each of these issues. While the problem of toxic contamination must be examined by your Board, it must be emphasized that planning and reuse should continue uninterrupted. As is the case with the Southern Pacific rail yards, contamination of the site, while making some planning aspects more difficult, does not mean marketing and reuse activities cannot proceed. Clearly, the toxics issues are of paramount importance, but the Mather situation is in many ways similar to that faced by the City and the Sacramento Housing and Redevelopment Agency (SHRA) in the reuse of the Southern Pacific yards. While some of the issues are unique to Mather, many options exist for the reuse of the base and the clean-up. In fact, while some of the base may well be seriously contaminated, it is often the expression of its reuse potential, via the planning process, which may be the catalyst for the expedited cleanup.

Total Toxic Clean-up Before Reuse:

On May 10, it was reported by Pentagon officials in Washington that it is possible that current law could forbid the conveyance of uncontaminated areas of a military base that are on the Federal Superfund list until the entire base is deemed "clean" (see Attachment 1). Mather is on the Superfund list, and therefore, if this interpretation of the law is correct and no legislation passes changing the law, it is possible that no conveyance could take place at Mather or other bases on the closure list until the contaminated areas are clean. For Mather, this could conceivably take at least ten years according to current estimates by base personnel.

This policy could result in a major hurdle for Mather reuse, since the accepted interpretation by the Air Force envisioned conveyance of uncontaminated sections of the base immediately upon closure.

Several actions are being undertaken in regard to this news as several bases around the country are affected (including the Sacramento Army Depot which is also on the Superfund list and scheduled for closure). First, Representatives Fazio and Ray of Georgia have introduced legislation which would allow the sale or transfer of uncontaminated portions of the base before clean-up is completed. Chances of passage are unknown at this point.

Second, the Air Force disagrees with the staff from the Environmental Protection Agency (EPA) and strongly maintains that uncontaminated sections of military bases can be conveyed. This issue is of critical importance to the Air Force and other defense agencies as many bases are affected. This is not just a Sacramento issue, and millions of dollars and thousands of acres of land are affected nationwide.

In essence, this issue is unresolved and could be unsettled for some time. While this could result in substantial impact on Sacramento County's reuse plans, it is strongly recommended at this time that we continue with our work plan without variance. If we wait until a decision is forthcoming from Washington regarding the Superfund issue, we would lose valuable planning time which would transfer into potential economic losses. We must continue to plan for reuse under the assumption that conveyance can occur in uncontaminated areas. In addition, staff must concurrently examine the potential impacts should the decision regarding no conveyance until clean-up is finished actually result. As staff learns more and develops some contingency plans, we will report back as appropriate.

Extent of Toxic Problem:

As noted earlier, Mather Air Force Base is currently on the federal Superfund list. On October 10, 1989, the State Department of Health Services (DHS), Air Force and EPA entered into a three party Federal Facility Agreement (FFA). The FFA formalizes the respective roles of state and federal regulatory agencies and the Air Force as each participates in the clean-up of the base.

On May 15, 1991, DHS issued a project status report on the extent of the toxic problem at Mather (Attachment 2). A summary of that report follows:

- Mather AFB opened in March 1918. Since that date, there has been continuing industrial activities including vehicle, aircraft and weapons maintenance.
- Thirty-one sites of surface soil contamination have been identified on-base. A June 1990 report has identified another 23 potential sites of soil contamination which require further investigation and may result in additional clean-up activities.
- A 3,000 foot plume of solvent contaminated groundwater is heading toward the base housing area and water supply wells. Solvent levels in the groundwater have been measured at levels in excess of 150 times the allowable state and federal drinking water standards. The extent of groundwater contamination has not yet been fully defined.
- An alternate drinking water source has been supplied to residents affected by off-base groundwater contamination.
- Approximately 200 groundwater monitoring wells have been installed to define the nature and extent of groundwater contamination beneath the base. Twenty-six monitoring wells have been placed off-base.

Potential implications for future land use is best summarized from a section of the DHS report:

"The reuse of various sites at Mather AFB may be affected by site contamination investigation and/or remediation activities. Allowances will be necessary for continued access to sites for monitoring or possible remedial measures.

Additionally, dependent upon the selected remedial measures, future land uses may need to be restricted. It should be noted that although site investigation efforts are currently scheduled to be completed prior to base closure, site remediation efforts may not be completed."

In essence, the extent and potential impacts of the toxics problem on reuse activities is still greatly unknown. The problems are still being studied, and staff is proceeding with aviation and non-aviation planning with the toxic problem being clearly identified as an unknown and important variable.

The federal government is required by law to clean-up the base. (It is possible that individual proponents could, if economically feasible, contribute to the clean-up process.) At this point, it is important that your Board be informed that the toxics problem is significant and this could affect reuse options. Staff will continue to provide additional information as received. In addition, we will be conferring with both state and federal regulatory agencies to continue to inform your Board regarding the status of toxic clean-up activities at the base.

Airport Noise Contour

The attached Scenario A Noise Exposure Map (noise contour) (Exhibit 1) represents a Mather aviation reuse concept that falls within the criteria established by the Board of Supervisors in April 1991 and takes into account the most recent announcements regarding military aviation in the Northern California region. The noise contour was produced by the firm of McClintock, Becker, and Associates using the Federal Aviation Administration (FAA) Integrated Noise Model Version 3.9 (INM 3.9).

The noise contour area, approximately 6,500 acres, is substantially smaller than the 12,147 acre criteria designated by the Board. This noise contour is based on a level of civilian and military aircraft activity that is summarized on Table 1. The total number of annual aircraft operations is approximately 295,000. The year in which this level of activity may be reached is a function of facility demand and the success of any marketing programs. This level of annual activity is below the airfield capacity for Mather of approximately 340,000 annual operations. Although the FAA has some concerns regarding their sponsorship of a public benefit conveyance based on this artificial capacity, this issue will be the subject of future negotiations between the County and the FAA.

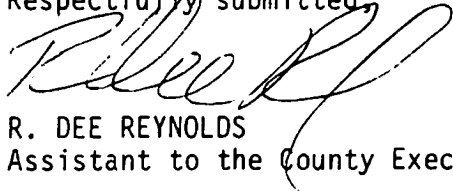
ECONOMIC CONSULTANT SELECTION, REVIEW OF ENVIRONMENTAL AND TOXIC
ISSUES, AND AIRPORT NOISE CONTOUR FOR MATHER AIR FORCE BASE
Page 6

The distribution of day, evening, and night aircraft operations assumed in the preparation of the Scenario A noise contour is presented on Table 2.

The aircraft activity has been allocated on flight tracks (aircraft routes) that were verified with the FAA, military air traffic control, and the various military operating units that are based on or may use Mather in the future. FAA ARTS 3A radar information from the Sacramento TRACON was also used to verify the flight tracks.

This modified noise contour was the subject of a meeting with representatives of the Rancho Cordova Chamber of Commerce on May 24. At this meeting it was agreed by the Rancho Cordova members and other concerned parties that the contours provided and the methodology used is accurate. Although the modified noise contour does cover some land outside of Rancho Cordova's Scenario IV contour, it is similar in geometry and all concerned parties agree that the attached modified noise contours should be transmitted to the Air Force for use in the environmental impact survey (EIS) as well as be used by the economic consultant in the economic analysis. Formal adoption of noise contours is subject to agreement by the Air Force and the Federal Aviation Administration (FAA).

Respectfully submitted,



R. DEE REYNOLDS
Assistant to the County Executive

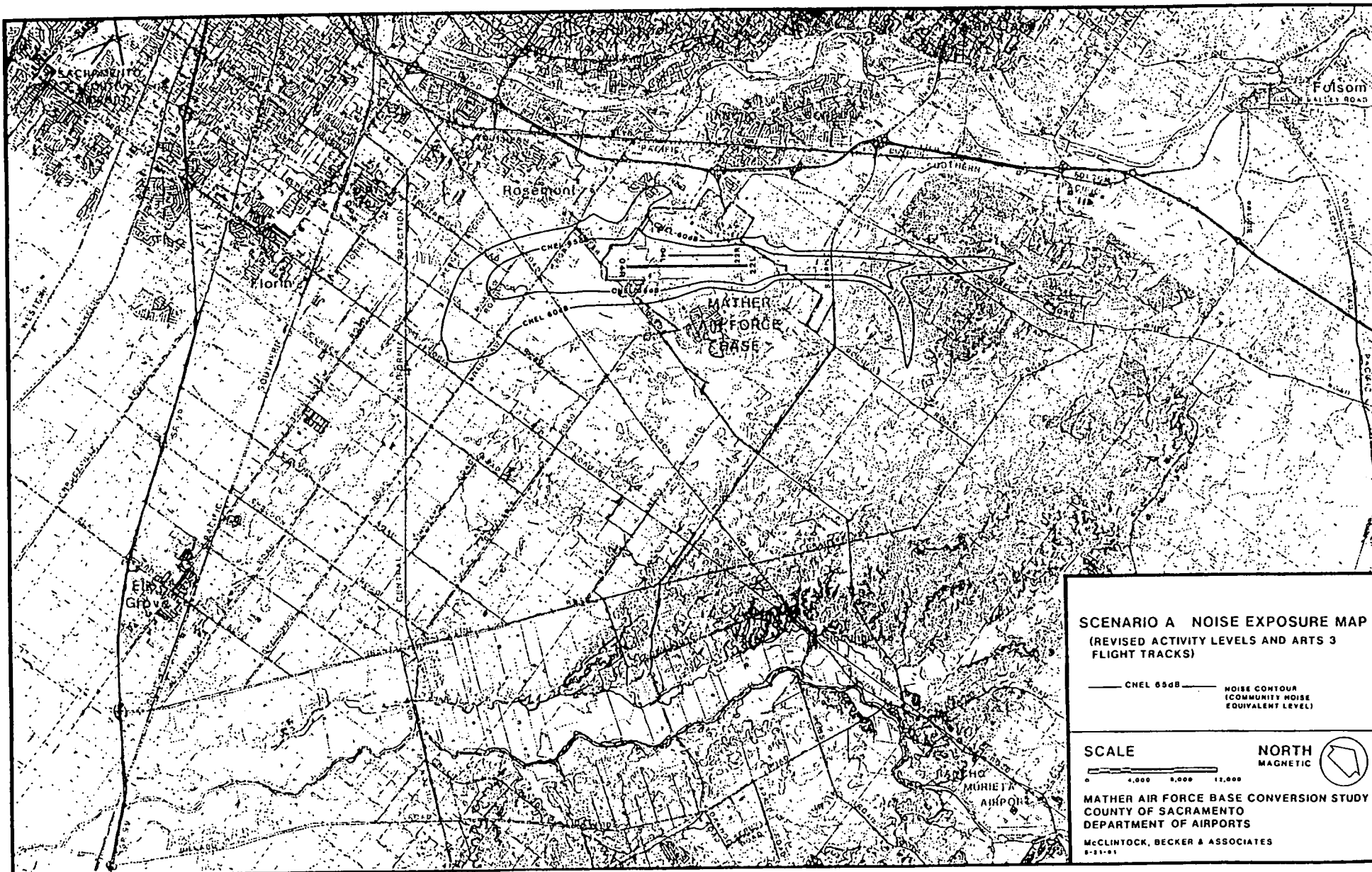
PJH:cj (afa14936)

Attachments

APPROVAL RECOMMENDED



BOB SMITH
County Executive



This noise contour is based on the assumptions indicated in the accompanying narrative and Tables 1 and 2. The total area of the 60 CNEL contour is approximately 6,500 acres.

TABLE 1

MATHER AFB CONVERSION STUDY
 AVERAGE DAY AND ANNUAL OPERATIONS BY AIRCRAFT CLASS

<u>Military/Government</u>	<u>Avg. Day</u>	<u>Annual</u>
KC-135E	16	5,840
C-5A/B	1	365
C-17	1	365
C-141	1	365
C-130	2	730
Jet Trainer	4	1,460
Aerial Tanker	10	3,650
Helicopters	10	3,650
Lt. Twin	<u>15</u>	<u>5,475</u>
	60	21,900
 <u>Civil Transport</u>		
B-757	70	25,550
B-767	16	5,840
B-747	2	730
B-727	<u>2</u>	<u>730</u>
	90	32,850
 <u>General Aviation</u>		
Single-Engine Prop	395	144,175
Twin-Engine Prop	197	71,905
Business Jet	33	12,045
Helicopters	<u>33</u>	<u>12,045</u>
	658	240,170
TOTALS	808	294,920

TABLE 2

**MATHER AFB CONVERSION STUDY
PERCENT DAY-EVENING-NIGHT SPLIT**

	<u>DAY</u>	<u>EVE</u>	<u>NIGHT</u>
Military/Government	90	5	5
Civil Transport	75	20	5
General Aviation	80	15	5



The Sacramento Bee

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SATURDAY, MAY 11, 1991

FOUNDED 1857 • VOLUME 369 • 35¢

Mather, Army Depot conversion plans hit new snag

By Laura Mecoy
Bee Washington Bureau

WASHINGTON — Efforts to convert two of Sacramento's military bases to civilian use would be pushed into the next century under the definition of hazardous waste cleanup laws that military officials provided Friday.

The Pentagon's top environmental officers threw a new hitch into plans to close 47 major military installations, including the Sacramento Army Depot and Mather Air Force Base, when they told the base-closing com-

mission Friday that environmental laws require hazardous waste be cleaned up before any land on a Superfund site is sold or transferred.

They previously had said they could sell off uncontaminated portions of installations they are shutting down while retaining the most polluted property during the lengthy cleanup process.

Mather, which is slated to close in two years, and the Sacramento Army Depot, which the Pentagon has recommended be shut down by 1997, are both on the Super-

fund list of the nation's most contaminated spots.

Base spokesmen said hazardous waste cleanup at the two Sacramento facilities will take at least 10 years, and environmental analysts are still determining the extent of contamination and the best means of eliminating toxics.

Reps. Robert Matsui, D-Sacramento, and Vic Fazio, D-West Sacramento, said this could pose a major hurdle for converting the Sacramento bases to civilian use. They are co-sponsoring legislation that would allow

the sale or transfer of uncontaminated portions of military Superfund sites before cleanup is completed.

"It's going to be a big problem for those communities that expect these closed bases to be the engines of economic development," Fazio said. "If they have to sit there without any opportunity for private economic development, there's going to be serious problems of unemployment and wasted resources."

Unless Congress changes the law, Matsui said, the environmental and legal problems will be a "significant setback" for plans to

turn Mather into a civilian air base or some other use.

"We can't allow 6,000 acres to remain encumbered because of toxic problems," he said.

But Gary Vest, Air Force deputy assistant secretary for environment, safety and occupational health, said the Environmental Protection Agency "intends for the Air Force to clean all sites on the installation before any properties can be transferred."

See DE-P01, back page, A22

Depot: Buyers' protection a key issue

Continued from page A1

"This would prohibit us from carving out the clean, uncontaminated parcels for sale and redevelopment," he added. "EPA is reconsidering its position, but a consistent, national policy has not yet been established."

Chris Holmes, EPA deputy assistant administrator, said the agency is indeed developing a new policy and will review base closures on a "case-by-case" basis.

"But the feeling at this point is you want to do the best possible job you can of protecting the public and the environment," he said.

Holmes said he believes most uncontaminated land can be sold, but he couldn't say whether bases with contaminated groundwater — as is the case at the Army Depot and Mather — would be considered uncontaminated land.

At the Army Depot, however, the Pentagon's closure recommendation already calls for selling or transferring its 485 acres "after cleanup." Patrick Christman, the depot's chief environmental officer, said that will take 10 to 15 years and cost \$65 million to \$77 million.

"The next obvious question is who would want to buy property that is a former (Superfund) site," he said. "At what point and time is someone willing to stand up and say, 'We are confident there are no other contaminated sites there'?"

Lewis Walker, Army deputy assistant secretary for environment, safety and occupational health, said he expects the sale or transfer of the Sacramento Army Depot's land will have to wait until the entire site is cleaned up because it is a "small industrial area."

But he also said he wants a complete assessment of pollution at the base before he makes a final decision on property disposal.

The Independent Base Closure and Realignment Commission, Congress and the president still must act on the Pentagon's recommendations to shut the depot and 30 other major military installations.

Sacramento community leaders have already said they

support closure of the depot so long as most of its jobs are moved to nearby McClellan Air Force Base.

At Mather, Col. Rick Blank, chief of environmental management, said it will be 2002 before the worst contamination of the groundwater is cleaned up enough to meet EPA standards.

That cleanup, along with other environmental restoration efforts, will cost more than \$60 million, and Blank said he's still trying to determine how to mop up toxic wastes at other spots on the base.

Mather was among 16 major military sites Congress approved shutting down in 1989, and Pentagon officials used those facilities Friday as examples of the type of difficulties local and federal officials will face as they try to close another 31 major bases over the next five years.

James Boatright, Air Force deputy assistant secretary for installations, said he's faced "one frustration after another" from a regulatory process that is "cumbersome and somewhat adversary" for selling or transferring the three Air Force bases — including Mather — that are Superfund sites and scheduled to shut down.

Boatright said it might be possible to lease property on these bases, but predicted that "large-scale disposals will be years away even if customers were standing in line to buy, which is presently not the case."

Moreover, he said, potential buyers want to be sure they know of any environmental hazards on the land, and they want to be indemnified, or protected, from any liability for those hazards. He said the federal government doesn't have the authority to give them that protection, no matter "how reasonable the request may be."

Fazio said the indemnification issue could be harder to resolve than the problem of selling off portions of land because there's no legal definition for "how clean is clean enough."

Matsui said he can't see any purchaser taking title to land, or any lender providing money for the purchase, without an assurance that the federal government will assume liability for the cleanup of any contaminants.

Memorandum

To : David Wang, Chief
Federal Facility Unit

Date: May 15, 1991

DW

From : Toxic Substances Control Program
10151 Croydon Way, Suite 3
855-7873

Subject: PROJECT REVIEW MATHER AFB

The project review memorandum updates my previous review, that was dated January 16, 1990.

I. HISTORICAL REVIEW

A. Background

Mather Air Force Base (AFB) opened in March 1918 as a training facility. The Base was operated sporadically from 1922 to 1941. Since 1941, Mather AFB's primary mission has been to train navigators to operate advanced navigation, bombing, missile, and electronic warfare systems. Industrial activities include vehicle, aircraft, and weapons maintenance.

In April 1989, Mather AFB was notified that the base would be closed by the Department of Defense (DOD). Additional information regarding the base closure is provided in Section IV.

B. Previous Remedial Activities

Numerous site investigations have been undertaken by the Air Force at Mather AFB. Those activities have included the installation of 84 monitoring wells, collection of soil samples, and conducting soil gas surveys. Additional past activities include, the provision of an alternate water source, including the eventual extension of a community water main, to residents affected by off-base ground water contamination. A total of 68 underground storage tanks (USTs) have also been removed.

Some of the contaminated soils found at the UST sites were treated by incineration in a mobile soil roaster.

II. PHYSICAL SETTING

A. Hydrogeology/Geology

Mather AFB is located on the eastern flank of the Central Valley. The facility is situated on ancient stream terraces located south of the broad alluvial plain that defines the American River Valley. Deposited silts, sands, and gravels comprise the principal shallow aquifer zones of the Central Valley. Two water bearing units are designated at Mather AFB. The upper unit is located within the upper portions of the Laguna Formation. The lower water bearing zone lies below a sequence of interbedded clays, silts, and sands.

B. Surface and Ground Water

The main surface drainage features at Mather include Morrison Creek and Mather Lake. Mather Lake is a 64 acre impoundment of the main channel of Morrison Creek. Mather Lake is located in the eastern portion of the base.

The depth to ground water in the upper water bearing zone ranges from 60 to 120 feet below ground surface (BGS). The depth to ground water in the lower water bearing zone is generally in excess of 150 feet BGS.

III. INSTALLATION RESTORATION PROGRAM SITES

During the previous efforts at Mather AFB, a total of 34 sites were identified. The attached map indicated the location of those sites. The previously identified sites have been broken up into two groups and are being investigated under separate Workplans. An additional group of sites will be investigated also. Those sites are currently being identified as the "Group 3 Sites".

A. AC&W Site

The Aircraft Control and Warning (AC&W) site is located up-gradient of the base housing area and has known ground water contamination by TCE. Disposal of waste solvents to an underground pipe is the suspected source of the contamination. However, the Air Force has not been able to locate the pipe. The investigation of three fuel spills were also included in the AC&W investigation, due to their proximity to the AC&W site.

From September 1989 to the present, the Air Force's contractor, IT Corporation, has been conducting field investigation at the AC&W site. Low levels of TCE and fuel constituents were found during the soil gas investigation. Data generated from soil boring indicated limited contamination of the soils. A total of 23 ground water monitoring wells have been installed during the investigation of the AC&W site. Additionally, four aquifer tests were also conducted. The extent of ground water contamination has been generally defined. However, additional monitoring wells will be installed to complete the plume definition.

In March 1990, IT undertook abandonment of the AC&W production well. The abandonment effort of the AC&W production well included: (1) removal of well pump and associated piping materials; (2) video logging of the well casing; (3) perforation of the casing, using explosive charges; and (4) pressurized grout sealing of the well casing. The intent of the well abandonment was to remove the possibility of contaminant migration/cross contamination via the well casing.

On April 1991, the AC&W Remedial Investigation (RI) Report became final. Based upon the findings of the report, the contamination of the AC&W site can be described as follows:

Soil sampling and analysis data indicated very limited evidence of fuel components or trichloroethylene (TCE) at the AC&W Site study area. Low levels of organic lead were found. This may be indicative of contamination by fuels.

The ground water investigation confirmed the presence of a TCE contaminant plume in the shallow water bearing zone. The maximum concentrations ranged from 400 to 800 parts per billion (ppb). The TCE plume is approximately 3,000 feet in length and is approaching the Base Housing area and supply wells. The contamination appears to be limited to the shallow water bearing zone. TCE is detected, consistently, in only one deep ground water monitoring well.

During regulatory review of the AC&W RI Report, it was determined that the contaminant plume was not fully characterized. Therefore, the Air Force will be conducting a subsequent field effort (installation of additional ground water monitoring wells) to complete definition of the plume. The effort will be documented in an addendum to the AC&W RI Report and is tentatively due by December 1991.

May 15, 1991

In March 1991, the Air Force submitted a Draft Feasibility Study (FS) Report. The FS Report, in conjunction with the Baseline Risk Assessment (a portion of the RI Report), indicates that soil remediation is not necessary. The FS Report recommends a ground water preferred remedial alternative of:

Extraction with Air Stripping/Vapor Phase Carbon Adsorption and discharge to Mather Lake or to the Publicly Owned Treatment Works

The Draft FS Report is currently being reviewed by the regulatory agencies. Agencies' comments are due to the Air Force by May 25, 1991.

B. Group 2 Sites

The 31 sites included in the Group 2 sites include:

Landfills	6
Fire Training Areas	4
Drainage Ditches	3
Sanitary Sewer	1
Asphalt Rubble Areas	2
Fuel Spills (USTs)	9
Disposal/burial Areas	4
Paint Shop	1
Septic Tank	1

Of those 31 sites, the Air Force previously recommended that no further actions were necessary at 8 sites. Previously, "No Further Action Decision Documents" were submitted by the Air Force. The Department of Health Services (Department) reviewed the documents and found deficiencies. The site evaluations were limited to the ground water medium and did not address possible impacts upon either the soil or air media. Final decisions on the "No Further Action" sites be determined during completion of the Group 2 Sites RI Report.

Field activities to investigate the remaining sites started in June 1990 and are continuing. Geophysical surveys were conducted in June 1990. Soil gas surveys were conducted in July 1990 and the installation of ground water monitoring wells began in August 1990. To date, 100 of 105 additional ground water monitoring wells have been installed. Of the 105 planned new wells, 6 were installed off-base in the 7100 Area (located in the south-west region of the base); 15 were installed in the West Ditch Area (located to the west of the base). An

additional 5 wells are planned to be installed off-base and up-gradient to the north-east, near three former base landfills. Initial ground water monitoring results are expected in approximately one month. Additional field activities included abandonment of 13 damaged existing monitoring wells.

The Group 2 Sites RI Report is scheduled to be submitted in February 1992.

C. Group 3 Sites

In June 1990, the Department (Facility Permitting Branch) issued a RCRA Facility Assessment (RFA), as a part of the RCRA permit issuance process. The RFA identified 48 Solid Waste Management Units (SWMUs) and 2 Areas of Concern (AOCs) for potential corrective action. Of those sites, 21 SWMUs and the 2 AOCs were referred to the CERCLA-RI/FS process. The remaining sites, 3 sites will be handled through the RCRA Corrective Action process and 24 sites were not recommend for any further action.

The Air Force and regulatory agencies are in the process of developing a schedule for investigation of the Group 3 sites. The proposed Draft Record of Decision (ROD) date is November 1994.

IV. **BASE CLOSURE**

The Base Closure and Realignment Act (Public Law 100-526) directs the DOD to close, among other facilities, Mather AFB. The closure is to be completed by September 30, 1995 according to that law. The training activities conducted at Mather AFB will be transferred to Beale AFB. Reuse options of Mather AFB are currently being evaluated. The environmental impacts of reuse of Mather AFB will be addressed in an Environmental Impact Statement, once reuse options have been determined.

The reuse of various sites at Mather AFB may be affected by site contamination investigation and/or remediation activities. Allowances will be necessary of continued access to sites for monitoring or possible remedial measures.

Additionally, dependent upon the selected remedial measures, future land uses may need to be restricted. It should be noted that although site investigation efforts are currently scheduled to be completed prior to base closure, site remediation efforts may not be completed.

V. COMMUNITY RELATIONS

A final Community Relation Plan (CRP) has been prepared by the Air Force and accepted by the Department. CRP activities include the issuance of a quarterly newsletter to the surrounding community.

VI. FEDERAL FACILITY AGREEMENT

The Air Force, EPA, and the Department have entered into a three party Federal Facility Agreement (FFA) for Mather AFB. That FFA became effective on October 10, 1989. To date, the Air Force has generally been in compliance with the agreement. The Department, Air Force, and EPA have tentatively agreed to modify the FFA. Minor modifications of the data submittal timeframes have been proposed. Additionally, the enforceable schedule will be modified to include the submission of an addendum to the AC&W RI Report and completion of the Group 3 Sites investigation.

The current FFA schedule is as follows:

	AC&W SITE DUE DATE	GROUP 2 SITES DUE DATE
RI REPORT	December 1990*	February 1992
FS REPORT	March 1991*	June 1992
PROPOSED PLAN	June 1991	September 1992
RI ADDENDUM	December 1991	
ROD	December 1991	March 1993

*Document submitted in compliance with FFA schedule.

The Air Force has proposed for completion of the Group 3 Site investigation the following schedule:

RI/FS REPORT	December 1993
PROPOSED PLAN	May 1994
ROD	November 1994

VII. REGULATORY AGENCY INVOLVEMENT

A. U. S. Environmental Protection Agency

The EPA began its involvement with the investigation and cleanup following inclusion of Mather AFB on the NPL. The EPA is a party to the FFA and is the lead regulatory agency for the site.

David Wang, Chief

Page 7

May 15, 1991

B. Regional Water Quality Control Board

The Regional Board has been active at Mather AFB for the RI/FS activities even before the Department involvement. However, the Regional Board is not a party to the FFA. Additional activities by the Regional Board include oversight of Mather AFB's Solid Waste Assessment Test (Water) investigation.

C. Department of Health Services

The Site Mitigation Unit is active with the oversight of the IRP at Mather AFB and the Department is a party to the FFA. Additionally, the Facility Permitting Unit is active with Mather's RCRA Hazardous Waste Storage Facility. State and Federal RCRA permits (for a 5 year period) were issued to Mather AFB and became effective on December 15, 1990. The Surveillance and Enforcement Unit routinely conducts site inspections at Mather AFB.

D. Sacramento County

Sacramento County's Air Pollution Control District (APCD) and Hazardous Materials Section are active in the regulation and oversight of Mather AFB. The APCD was active in the permitting of the mobile soil roaster for treatment of contaminated soils found during the UST investigation. Additionally, the County is overseeing Mather AFB's UST program.

VIII. OUTSTANDING ISSUES AND RECOMMENDATIONS

By May 24, 1991, I will issue comments on the Draft AC&W FS Report. Additionally, I will be working with the Air Force and EPA on minor modifications to the FFA and finalization of an enforceable schedule for submittal of the AC&W RI Addendum and completion of the Group 3 Sites investigations.



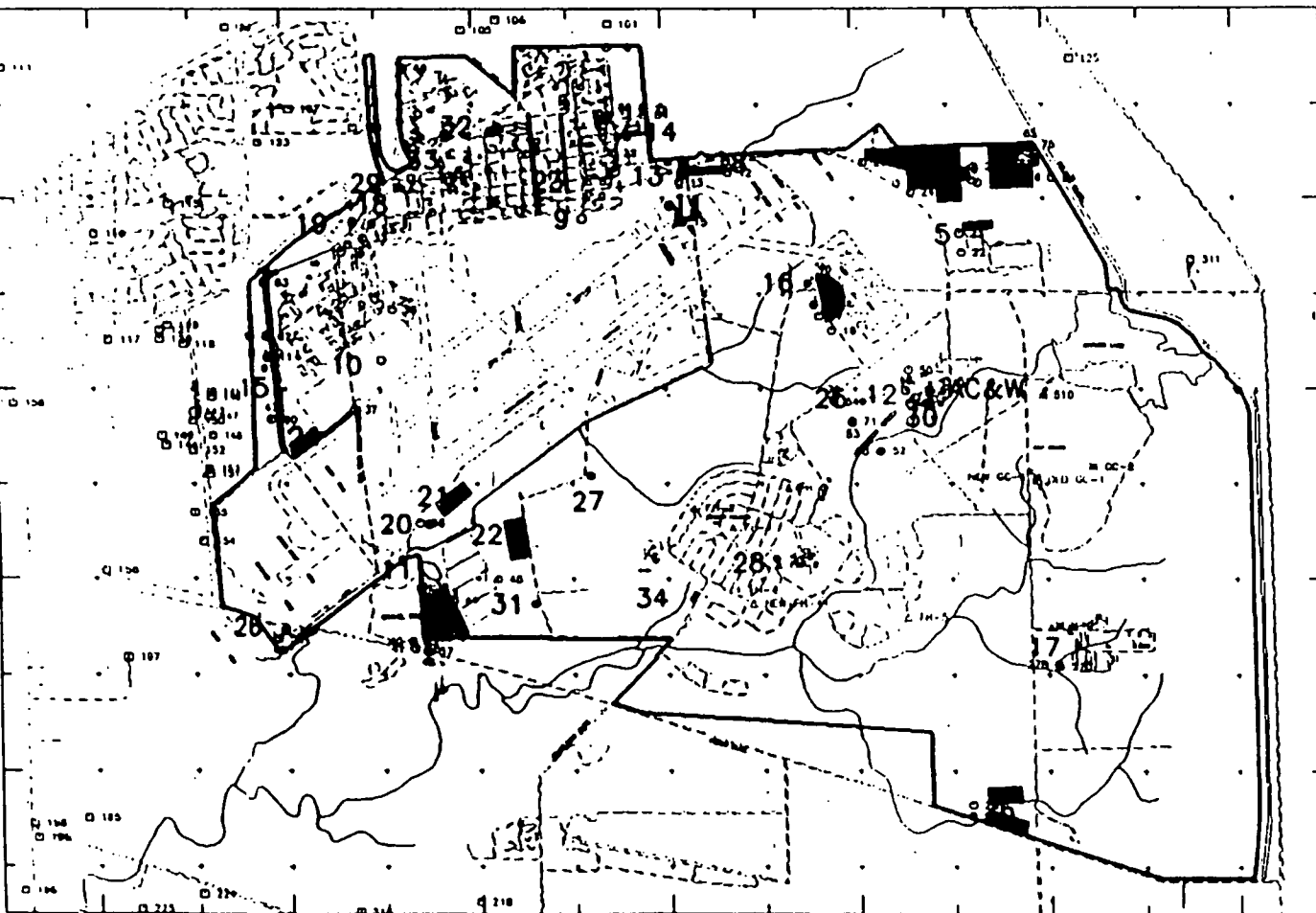
Tracie Billington, P.E.
Waste Management Engineer
Site Mitigation Branch

Attachment

cc: Mr. Bill Hughes
Mather AFB
323 ABG/EM
Mather AFB, CA 95655-5000

MATHER AIR FORCE BASE IRP SITES AND WELLS

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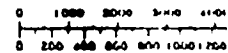
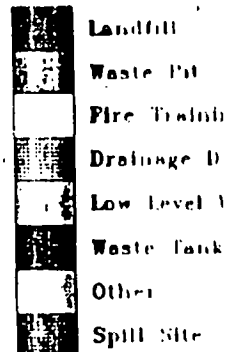


IRP SITES

USAF ID

1. Runway Overrun Landfill	LF01
2. "B150" Area Landfill	LF02
3. N.E. Perimeter Landfill No. 1	LF03
4. N.E. Perimeter Landfill No. 2	LF04
5. N.E. Perimeter Landfill No. 3	LF05
6. Firing Range Landfill Sites	LF06
7. "7100" Area Disposal Site	WP01
8. Fire Dept. Training Area No. 1	FT01
9. Fire Dept. Training Area No. 2	FT02
10. Fire Dept. Training Area No. 3	FT03
11. Fire Dept. Training Area	FT04
12. AC&W Disposal Site	WP02
13. Drainage Ditch No. 1	DD01
14. Drainage Ditch No. 2	DD02
15. West Ditch	DD03
16. Electron Tube Burial Site	LI01
17. Weapons Storage Area Septic Tank	WT01
18. Old Burial Site	LF07
19. Fuel Tank Sludge Burial Site	WP01
20. MOGAS Spill Site	SS01
21. Asphalt Rubble Storage Site	OT01
22. Asphalt Rubble Storage Site	OT02
23. Sanitary Sewer System E. of Elmore St.	OT03
24. 1983 JP-4 Spill Site	SS02
25. Fuel Spill at Building 10100	SS03
26. Fuel Spill at Building 10072	SS04
27. Fuel Spill at Building 10060	SS05
28. Fuel Spill at Building 16100	SS06
29. P.O.L. YARD #4 Building 3171	SS07
30. Fuel Spill at Building 10300	SS08
31. Fuel Spill at Building 10090	SS09
32. Fuel Spill at AAFES Station	SS10
33. Fuel Spill at Paint Shop	SS11
34. Fuel Spill at AAFES Station No. 2	SS12

IRP SITE TYPE



- Monitoring Well Location and Number
- △ Active Base Supply Well Location and Number
- Off-Base Well Locations (per USGS)
- + Plugged and Abandoned Wells
- * Non-Potable Wells

