

Exhibit E – Redacted in its entirety under Exemption 7(E), 7(F)

**Exhibit F  
(Permit Exhibit C and D)**

**List of Landlord's  
Environmental Reports**

**Exhibit F-1**  
**(Permit Exhibit D-1)**  
**NASA Permits and Program Reports**

# Exhibit F-2 (Permit D-2) Environmental Reports

- (a) Permit Exhibit C ANG MFA Final EBS (Aug04)
- (b) Emissions Reduction Credits From the Closure of NAS Moffett Fld 1993
- (c) Final Additional Petroleum Sites Investigation Field Work Plan
- (d) Final Additional Petroleum Sites Investigation Technical Memorandum
- (e) Final Installation Restoration Program Petroleum Sites
- (f) Final Installation Restoration Program Petroleum Sites – Characterization Report
- (g) Petroleum Tank Sites Investigation Draft Technical Memorandum
- (h) Phase 1 Basewide Tank Closure Report
- (i) Remaining UST Sites Investigation Field Work Plan Draft
- (j) Revised Final Installation Restoration Program Petroleum Site
- (k) Site 5 Groundwater Treatability Study Draft Technical Memorandum
- (l) Technical Memorandum Petroleum Sites Petroleum Cleanup Level
- (m) Base-wide Petroleum Site Evaluation Methodology Technical Memorandum (Appendix D Site 15 Petroleum Evaluation)
- (n) Base-wide Tank Site Closure Report
- (o) Draft Additional Petroleum Sites Investigation Technical Memo
- (p) Draft Base-wide Petroleum Site Evaluation Methodology Technical Memorandum
- (q) Draft Final Installation Restoration Program Petroleum Sites
- (r) Draft Site 5 Phase 1 Corrective Actions Technical Memorandum

# Exhibit F-3 (Permit Exhibit D-3) Historic Property Re-use Guidelines

Exhibit F-3 is available for review at the following link. To view the documents, don't use the drop down reference for the historic district. Point the mouse over Bldg 047 on the map and double click to review. It is rather large. Please advise if you can't open the link.:

[http://historicproperties.arc.nasa.gov/reusemap/reuse\\_guidelines.html](http://historicproperties.arc.nasa.gov/reusemap/reuse_guidelines.html)

# Exhibit G

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Exhibit H – Redacted in its entirety under Exemption 7(E), 7(F)

# Exhibit I Facilities

Exhibit I.1 - NASA/ANG Agreement on "Pickling" of Cantonment Area Facility  
Exhibit I.2 - NASA/ANG Agreement on "Pickling" of Cantonment Area Facility



## BUILDING CLOSURE ACTIONS

### FACILITY DEFINITIONS:

- **PICKLED FACILITIES:** Facilities approved by the Facilities Board (FB) for closure.

- Chosen to have no further users prior to closure date.
- Placed in "Vacant Status" on Real Property Report (OPR: DERR)
- Placed in a closure condition to support Energy Conservation with the following considerations:
  - Fair Market Value (FMV) protection includes:
    - Temperature protection (OPR: DEE, DEMM)
    - Minimal electrical requirements (OPR: DEE, DEME)
    - Other inputs to maintain FMV (OPR: DEM, DEE)
  - Security: physical (OPR: SPS) and fire (OPR: DEF)
  - Communication systems (OPR: CS)
  - Facility Operations (OPR: User)
- Facility placed in closure condition code A, B, or C.

- **WINTERIZED FACILITIES:** Facilities vacated by their user and turned over to Civil Engineering, for consideration of future use and consolidation by the Space Utilization Panel (SUP).

- Placed in a closure condition to support Energy Conservation with the following considerations:
  - Future use (OPR: DER)
  - Fair Market Value (FMV) protection includes:
    - Temperature protection (OPR: DEMM)
    - Minimal electrical requirements (OPR: DEME)
    - Other inputs to maintain FMV (OPR: DEM, DEE)
  - Security: physical (OPR: SPS) and fire (OPR: DEF)
  - Communication systems (OPR: CS)
  - Facility Operations (OPR: User)
- Facility placed in closure condition code A or B.

- **EMPTY FACILITIES:** Those facilities that have been or are being vacated by their user.

- Status to be determined by the Closure Working Group (CWG).
- Facility placed in closure condition code A only.

CLOSURE CONDITION CODES:

- CONDITION "A": Minimum actions required.
  - Supply items removed.
  - Building swept clean.
  - All personal equipment removed.
  - Interior door keys tagged and left in doors.
  - Exterior door keys tagged and turned in.
  - Lights shut off.
  - Heat turned down to 55 degrees F, unless otherwise indicated.
  - Facility secured.

- CONDITION "B": Minimum winterization actions.
  - Perform all Condition "A" actions.
  - Winterize Air conditioning systems.
  - Adjust heat 50 to 55 degrees.
  - Fire alarm systems remain active.
  - Consider removal of communications equipment.
  - Electrical power available for:
    - Fire alarm systems.
    - Sump pumps in basements.
    - Heat convertors.
    - Emergency Lighting.

- CONDITION "C":
  - Complete all action required for Condition "B".
  - Shut off and drain all water systems.
  - Board up windows.
  - Turn off all heat.
  - Install heat tape on water service lines from service to below frost line.
  - Remove all salvageable communications equipment.
  - Maintain fire alarm systems.
  - Maintain emergency lighting.
  - Replace exterior locks and secure facility.

NOTE: Actions like the removal of lavs, toilets, light fixtures, radiators, water fountains, light switches, electrical outlets, fire protection equipment, thermostats, phone distribution panels, electrical distribution panels, doors, windows, and the like are not acceptable actions under the current closure law, and should not be considered.

**DECISION TREE:**

- **FACILITIES BOARD (FB):** The Facilities Board will determine the final status of each facility.
  
- **SPACE UTILIZATION PANEL (SUP):** Reports to the FB, makes recommendations as to the status of facilities for either reuse or full closure, i.e. immediate Reuse, Winterization, or Pickling.
  - Follows same structure as the Facilities Working Panel (FWP).
  - POC/Recorder is Reutilization and Real Property Branch (DER).
  
- **CLOSURE WORKING GROUP (CWG):** Reports to the SUP, investigates proper disposition of facilities, for present use, and for current and future closure.
  - POC/Chairperson is DER
  - Select and prioritize facilities to be surveyed.
  - Provide guidance to Closure Survey Teams.
  - Consolidate CST information.
  - Select closure condition codes.
  - CWG consists of working representative from:
    - DEM                                --- Supply
    - DEE                                --- SVS
    - DEF                                --- HWR
    - DEV                                --- CARE Office
    - SPS                                --- FMC
    - COMM
    - Users (specifically the Wing)
  
- **CLOSURE SURVEY TEAMS (CST):** Reports to CWG members, teams collect required data on assigned facilities.
  - Establish cost figures to vacate facilities in several manners.
    - Cost to "EMPTY" facility and maintain at condition.
    - Cost to "Winterize" facility and maintain at condition.
    - Cost to "Un-Winterize" facility.
    - Cost to "PICKLE" facility and maintain at condition.
    - Cost to "Un-PICKLE" facility.
  - Define site specific requirement, limitations, and parameters for each facility. (This recognizes facility individuality.)

## PART II TEACHING PLAN

**ATTENTION:** *(SLIDE #1)* If you aren't aware of it, the U.S. military is still in a state of draw down. As soon as the 1994 elections are complete, the 1995 Base Realignment and Closure Committee (BRAC) will meet to determine the fate of our remaining military installations. Estimates for the final BRAC indicate that the number of bases to be identified for realignment or closure will equal the total number of bases closed/realigned from the previous four BRACs.

**MOTIVATION:** With that in mind, there is a good chance that you will be involved with the closure or realignment of a base. Especially since most of my audience are CE Officers. Even those who are not will probably be involved either as a special project officer or through TDY assignment to assist in closure ops.

**TRANSITION:** Since my background and experience is in CE closure operations, this informal lecture will be given from that point of view. Since this is an informal lecture, I encourage you to ask questions and make comments. Additionally, since this is a distance learning environment, just speak up. To start off, I don't claim to be the world's expert on closing a base. I do want to present the problems we encountered at Lowry AFB and the solutions we used. Hopefully they will assist you in your planning if you are ever involved with a base closure.

**OVERVIEW:** Since we are on limited time I am going to discuss only the major planning areas from a CE perspective. In this lecture, I plan to discuss the following:

*(SLIDE #2)*

- I. BACKGROUND
- II. PLANNING
- III. CLOSURE AND PICKLING OPERATIONS
- IV. OTHER INFLUENCES ON CLOSURE OPERATIONS
- V. REVIEW

**TRANSITION:** To start this show off, I need to give a little background on the situation I was involved in:

## BODY

### I. BACKGROUND (SLIDE #3)

A. Lowry AFB, located in Denver, CO was selected for closure by the 1991 BRAC and was confirmed by Congress in October 1991 to close on 30 September 1994.

B. Immediately following the closure notification, Lowry hosted a base closure conference with representatives from Chanute, Williams and Mather AFB who were well on their way to closing. Much of the Lowry program resulted from this initial meeting.

C. Lowry AFB was an Air Education and Training Command (AETC) base that hosted a wide range of training activities from audio/visual training to munitions loading. In addition, the Base hosted several non-AETC organizations such as the 2 Space Warning Detachment and the Defense Finance and Accounting Service (DFAS).

D. Although the base did not have an active runway since 1968, it did have over 570 buildings totaling well over 3 million square feet of administrative, billeting, support and training facilities on over 25,000 acres of land.

TRANSITION: Now that you have an idea of what we were dealing with, I'd like to start the meat of this lesson with the first step in the closure process - PLANNING

### II. PLANNING AREAS (SLIDE #4): Manpower Management, Resource Requirements, and Pickling crew work programming.

#### A Manpower Management (SLIDE #5):

##### 1. I.D. Skill Requirements

##### a. Basic Operations

- Pest Control
- Self Help
- Digging Permits
- Planning Support
- HVAC Operations (Ht Plant, Summer startup)

##### b. Critical Skills

- Technical (Plumbers, HVAC, Carp, Elec)
- Support (Logistics, Environmental, Work Control)
- Other Rqmts (Computer Literacy, Specialized training (Baseline Phys, HAZWOPER, State Certs))

##### c. I.D. those shops or ops exclusively civilian

- Civ Departures uncontrolled (RIF, Job Hunting)
- Example: Pest Control

A. Manpower Management (*SLIDE #5*): (Continued)

2. Review Available Manning and Existing Skills
  - a. PCS, Separation, Retirements
  - b. Civilian Incentives, RIFs, Retirements, Transfers
3. I.D. Shortfalls and Program backfill
  - a. Overages
  - b. Summer Hires
  - c. Extended RIF
  - d. TDY personnel
  - e. Contract

B. Resource Requirements (*SLIDE #6*):

1. Supplies/Equipment
  - a. Plywood
  - b. Water Treatment Chemicals
  - c. Antifreeze
  - d. Tools
2. Vehicles
  - a. General Purpose
  - b. Special Purpose (Crane, Backhoe, FE Loader)  
(Snow Rmvl, Utility disconnects, emergencies)
  - c. Watch out for "suitable subs"
  - d. Needs to be an aggressive & knowledgeable individual
3. Establish Turn-In dates to TRANS and DRMO
  - a. If you don't need it - turn it in
  - b. Establish rental agreements if necessary
  - c. Get rid of all equipment/vehicles not going to the caretaker
4. Establish Workarounds for Materials and Services
  - a. Rental Agreements
  - b. BPA's
  - c. Pre-Approved Form 9
  - d. Credit Card

**TRANSITION:** Now that we've got the planning out of the way, lets talk about how we structured the operations flight for closure and pickling ops.

III. CLOSURE AND PICKLING PROGRAMMING (SLIDE #7): Facility Inspection; Planning Factors; Selling the Program.

Before I go any further I will need to define some terms:

(SLIDE #8): **CLOSED** - *When the building occupant passes the final inspection and transfers responsibility and keys to Civil Engineering.*

**PICKLED** - *A Facility is considered "pickled" when the Civil Engineers have completed those action required to bring a facility down to a certain maintenance level.*

(SLIDE #9): **MAINTENANCE (OR PICKLING) LEVEL:**

P.L. 1 - OPERATIONAL: *Facilities, systems and equipment will be maintained at fully operational levels.*

P.L. 2 - PRESERVED (HEAT & AIR CONDITIONING OPERATIONAL): *Maintenance and repair is required to maintain the structural integrity, weather tightness, and utilities of the facility to limit deterioration.*

P.L. 3 - PRESERVED BUT NO AIR CONDITIONING: *Same as level 2, except no air conditioning is provided.*

P.L. 4 - PRESERVED BUT NO HEAT OR AIR CONDITIONING: *Same as level 2 except no heat or air conditioning is provided and all utilities are turned off. Water lines are drained and sewer traps are routinely treated with a non toxic antifreeze.*

P.L. 5 - LEASED: *All utilities will be provided to the facility on a fee basis. No other maintenance, repair or service will be provided.*

P.L. 6 - ABANDONED FACILITY: *Facilities, systems and equipment which have been permanently. All utilities are physically disconnected.*

- A. Facility Inspection (CE, Supply, CARE) (SLIDE #10)
1. 30 - 60 - 90 Day out inspections
  2. Results briefed to Training Center Commander
  3. Identified furniture, community equipment, Accountable equipment
  4. Environmental
  5. Cleanliness
- B Facility Pickling (SLIDE #11)
1. Planning factors initially based on historical data from Chanute AFB, IL
  2. Updated as Pickling Crews overcame learning curve.

III. CLOSURE AND PICKLING PROGRAMMING : (Continued)

(SLIDE #12)

PICKLING LEVEL	FACILITY TYPE	PLANNING FACTOR Man-Hr per 1,000 SF
1	All	0.0
2	All	1.0
3	Barracks	2.0
3	Training/Administrative	1.0
3	Average for All P.L. 3	2.0
4	Barracks	3.0
4	Training/Administrative	6.0
4	Maintenance/Production	9.0
4	Storage	11.0
4	Average for All P.L. 4	8.0
5	All	0.0
6	Training/Administrative	11.0
6	Storage	16.0
6	Average for All P.L. 6	12.0

*Notes on Planning Factors*

- Large Facilities (>50,000 SF) tend to skew data

Convert to monthly (SLIDE #13)

{EMBED MSGraph As \\* mergeformat}

**FACILITY PICKLING NOTES**

- Effect of Late Turnovers

(SLIDE #14)

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TRANSITION: All this information is now used to "Sell the Program"

C. "Selling the Program" (SLIDE #15)

1. Level of Effort v. No. of Buildings
2. Mission Movement support and it's effects
3. "Special" Projects
4. No More "Business as Usual"



**TRANSITION:** Now that we've discussed the planning, lets talk a little about implementation, specifically about how we structured our operation to fit the new mission of closure.

#### IV. CLOSURE AND PICKLING OPERATIONS (*SLIDE #16*)

- A. Notify base what operations will cease and draw down dates
  - 1. Acceptance of work requests
  - 2. Routine & Urgent Job Orders
  - 3. Pest & Weed Control
  - 4. Recurring Maintenance
  - 5. Air Conditioning & Heating Support
  
- B. Reorganize into Closure Teams (*SLIDE #17*)
  - 1. Pickling Teams
    - a. 5 Multi-skilled teams
    - b. Each with team chief
    - c. Single liaison to coordinate
  - 2. Mechanical Support Team
    - a. Air Conditioning/Heating Support
    - b. Pre-Pickle Buildings
  - 3. Emergency Response Team
  - 4. Equipment Operations
    - a. Special Projects
    - b. Support Pickling Teams on As-Needed Basis
  - 5. Mission (Training) Movement Team

**TRANSITION:** Of course it can't be this simple. You're right - There is a whole cornucopia of issues that still need to be planned for:

#### V. OTHER INFLUENCES: (*SLIDE #18*)

- A. Hazardous Materials Turn-In & Handling
  - 1. Amnesty Days
  - 2. CFC's
    - a. Refrigerators
    - b. Window Air Conditioners
    - c. Water Coolers/Fountains
  
- B. Grounds Maintenance
  - 1. Sprinkler Systems
  - 2. Lawn Mower/Weedeaters
  - 3. Rolloffs
  - 4. Summer Hires

V. OTHER INFLUENCES: (Continued)

- C. Central Heating Plant
  - 1. Standby Fuel
  - 2. Air Permits
  - 3. Cantonment Area
  - 4. Caretaker Training
  
- D. Alarms/Controls
  - 1. Removal & Turn-in of Security alarms
  - 2. Fire alarm control (through EMCS)
  - 3. EMCS of remaining facilities
  
- E. Unforseens
  - 1. DV Visits
  - 2. Parades/Ceremonies

TRANSITION: Now I have very quickly gone over the planning involved in closing a base. Before I wrap this lesson up, I would like to ask if there are any further questions? If not, Lets Review:

VI. REVIEW: (SLIDE #19)

- I. BACKGROUND
- II. PLANNING
- III. CLOSURE AND PICKLING OPERATIONS
- IV. OTHER INFLUENCES ON CLOSURE OPERATIONS
- V. REVIEW

REMOTIVATION: None of you know if or when you may be involved with the closure or realignment of a base. Now you at least know some of the issues and problems involved and maybe some ideas to do a great job. If you go away from this lecture remembering just one thing: (SLIDE #20):

*Proper Planning Avoids Major Problems During Base Closure*

**PART III**  
**TEST ITEMS**

ITEM 1

OBJECTIVE: (C) TOOTLIFEST to comprehend the planning required by the Civil Engineer to perform a proper base closure.

SAMPLE OF BEHAVIOR: Predicts the affect of poor planning on closure operations.

CRITERION OBJECTIVE: Given an essay question following completion of the lesson block on how proper planning avoids problems in base closure operations and without the use of notes, writes an acceptable summary of the lesson block.

QUESTION: In your own words and based on the lesson, predict the affect of poor or no planning in a closure base situation. (limit your response to one page).

KEY: The student should provide an answer that covers the three planning areas covered in the lesson (Manpower, Resources, & Work Scheduling)

10 POINTS, For a description by the student that indicates that poor planning in the area of manpower will produce shortfalls in critical skills and that certain base functions will cease.

10 POINTS, For a description by the student that predicts that poor planning in the area of resource management will cause equipment and material shortfalls that may result in facilities not being closed to their proper maintenance level.

10 POINTS, For a description by the student that predicts that poor planning in the area of work scheduling will result in no prioritization, low morale, and bad decision making.

30 POINTS TOTAL

**PART III  
TEST ITEMS**

**ITEM 2**

**OBJECTIVE:** (C) TOOTLIFEST to comprehend the planning required by the Civil Engineer to perform a proper base closure.

**SAMPLE OF BEHAVIOR:** Gives additional examples of areas requiring prior planning for base closure.

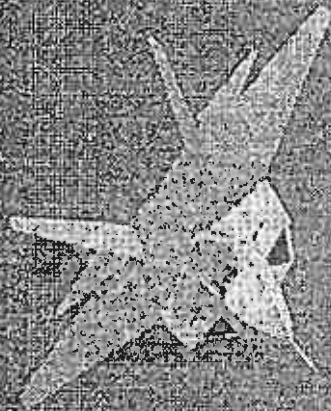
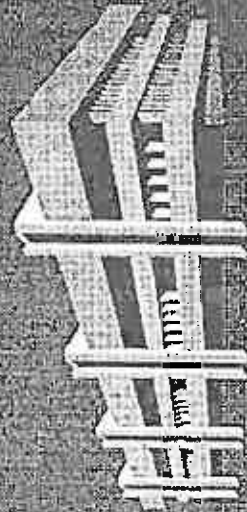
**CRITERION OBJECTIVE:** Given an essay question following completion of the lesson block on how proper planning avoids problems in base closure operations and without the use of notes, suggests an alternative.

**QUESTION:** In your own words and based on the lesson, give another example of base operations that requires prior planning for base closure. Be sure to include at least three specific areas requiring thought.

**KEY:** Any base operation (flightline, services, supply, etc.) is correct.

6 POINTS, 2 points each for each subarea identified.

6 POINTS TOTAL



**BACKGROUND**

**PLANNING**

**CLOSURE & PICKLING OPERATIONS**

**OTHER INFLUENCES**

**REVIEW**



**LOCATION: DENVER, CO**

**AETC BASE**

✓ ENLISTED TRAINING

✓ DETACHED UNITS

**STATISTICS**

✓ INACTIVE RUNWAY (CLOSED IN 1968)

✓ 570 FACILITIES TOTALLING 3,000,000 SQUARE FT

✓ MORE THAN 25,000 ACRES

**SELECTED BY 1991 BRAC TO CLOSE**

**30 SEP 1994**

**MANPOWER MANAGEMENT**  
**RESOURCES MANAGEMENT**  
**CLOSURE CREW WORK**  
**PROGRAMMING**



## **I.D. OPERATIONS**

**BASIC OPS**

**CRITICAL SKILLS**

**I.D. EXCLUSIVELY CIVILIAN SHOPS**

## **REVIEW AVAILABLE MANNING**

**MILITARY - PCS, SEPARATIONS, RETIREMENT**

**CIVILIAN - INCENTIVES, RIF, RETIREMENT,  
TRANSFERS, NEW JOB**

## **I.D. SHORTFALLS & PROGRAM BACKFILLS**

**SUPPLIES/EQUIPMENT**  
**VEHICLES**

- ✓ GENERAL PURPOSE
- ✓ SPECIAL PURPOSE

**ESTABLISH TURN-IN DATES**

✓ "DON'T NEED IT - TURN IT IN"

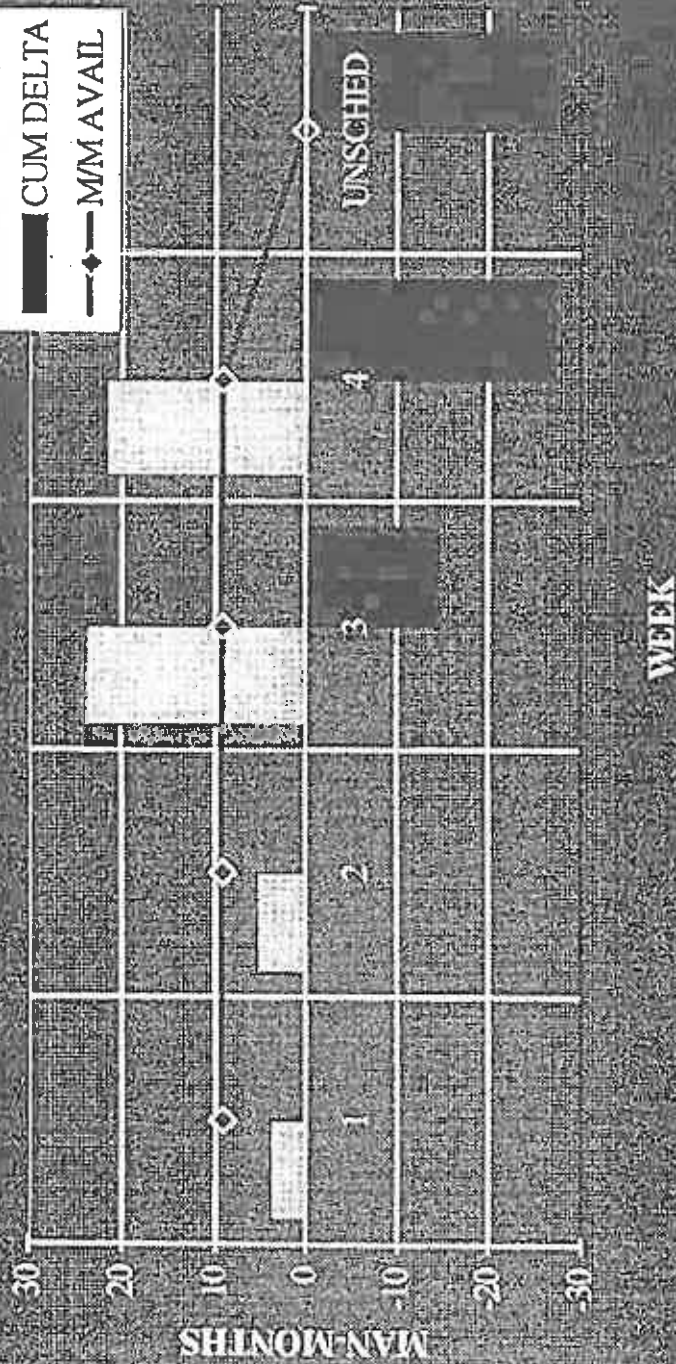
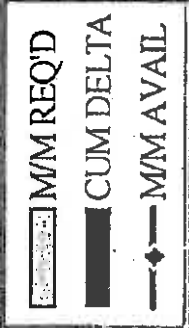
**ESTABLISH WORK-AROUNDS**

- ✓ RENTALS
- ✓ BPA
- ✓ CREDIT CARDS

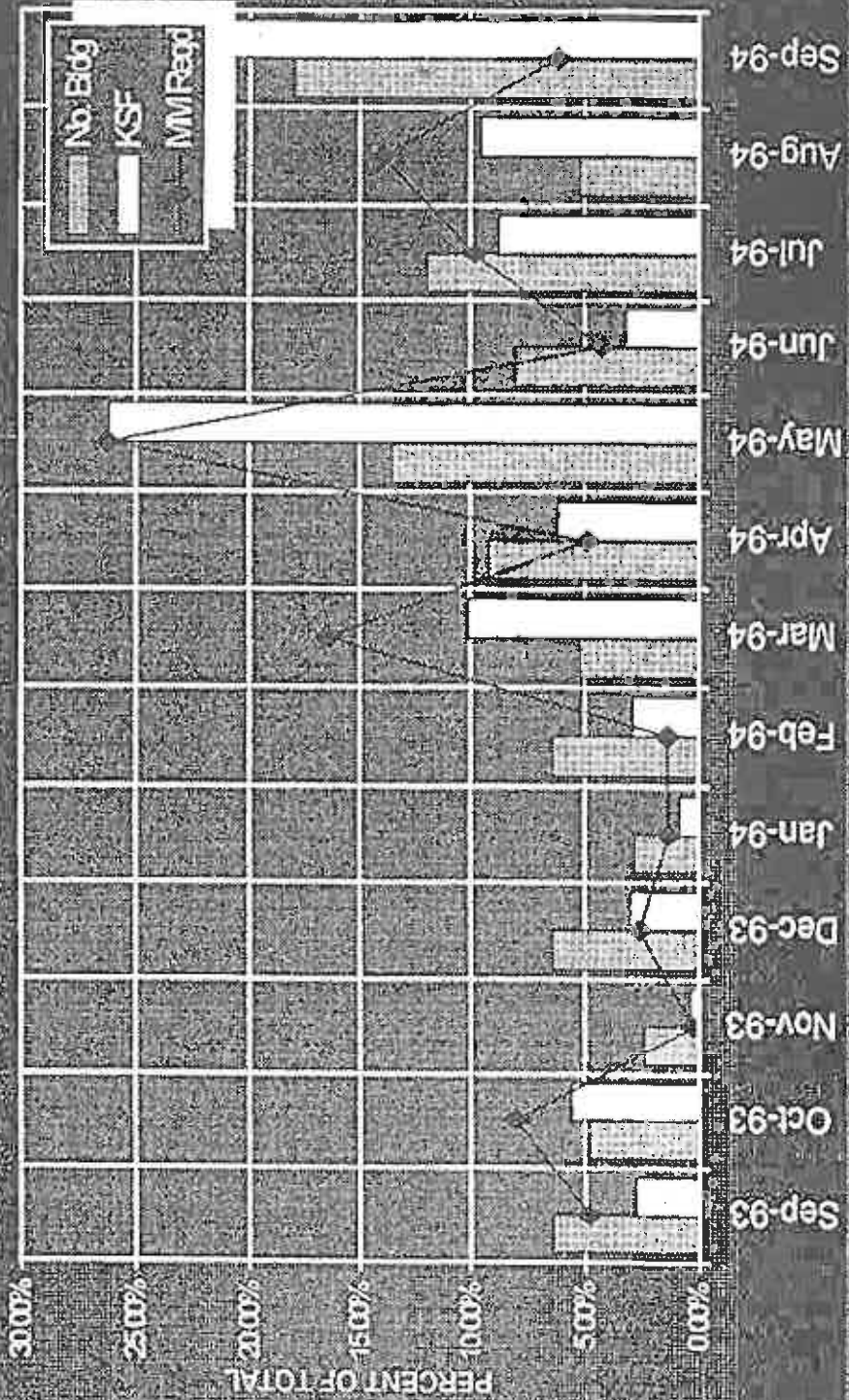
**FACILITY INSPECTIONS  
PROGRAMMING FACTORS  
"SELLING THE PROGRAM"**



# FACILITY PICKLING MAY PROJECTION



# FACILITY PICKLING



**PICKLING  
LEVEL**

1  
2  
3  
4  
5  
6

**PLANNING  
FACTOR**

M-H/1,000 SF

0.0  
1.0  
2.0  
8.0  
0.0  
12.0



**30 - 60 - 90 INSPECTIONS**

**RESULTS BRIEFED TO TRAINING  
CENTER COMMANDER**

**LD's FURNITURE, COMMUNITY  
EQUIPMENT, ACCOUNTABLE  
EQUIPMENT**

**ENVIRONMENTAL**

**CLEANLINESS**

DERIVED FROM HISTORICAL DATA  
UPDATED AS LEARNING CURVE WAS  
OVERCOME



**CLOSED** - When the building occupant passes the final inspection and transfers responsibility and keys to CE

**PICKLED** - A facility is considered pickled when CE has completed those actions required to bring that facility down to the required maintenance level

**LEVEL 1 - OPERATIONAL**

**LEVEL 2 - PRESERVED WITH HEAT  
AND A/C OPERATIONAL**

**LEVEL 3 - PRESERVED WITH NO A/C**

**LEVEL 4 - PRESERVED WITH NO HEAT  
OR A/C**

**LEVEL 5 - LEASED**

**LEVEL 6 - ABANDONED**

**LEVEL OF EFFORT VS. NUMBER OF BUILDINGS**

**MISSION MOVEMENT SUPPORT**

**“SPECIAL” PROJECTS**

**NO MORE “BUSINESS AS USUAL”**



**NOTIFICATION OF DRAWDOWN  
MILESTONES (CE EXAMPLE)**

✓ ACCEPTANCE OF WORK REQUESTS

✓ ROUTINE & URGENT JOB ORDERS

✓ PEST & WEED CONTROL

✓ RECURRENCE MAINTENANCE

✓ AIR CONDITIONING SUPPORT

**PICKLING TEAMS**

**MULTI-CRAFT**

**MECHANICAL SUPPORT TEAM**

**PRE-PICKLE FACILITIES**

**EMERGENCY RESPONSE TEAM**

**EQUIPMENT OPERATIONS TEAM**

**MISSION MOVEMENT TEAM**

**HAZARDOUS MATERIALS TURN-IN &  
HANDLING  
GROUNDS MAINTENANCE  
CENTRAL HEATING PLANT  
ALARMS & CONTROLS  
UNFORESEEN ITEMS**



**BACKGROUND  
PLANNING  
CLOSURE & PICKLING OPERATIONS  
OTHER INFLUENCES**

**PROPER PLANNING  
AVOIDS MAJOR  
PROBLEMS DURING  
BASE CLOSURE**



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Exhibit K – Redacted in its entirety under Exemption 7(E), 7(F)