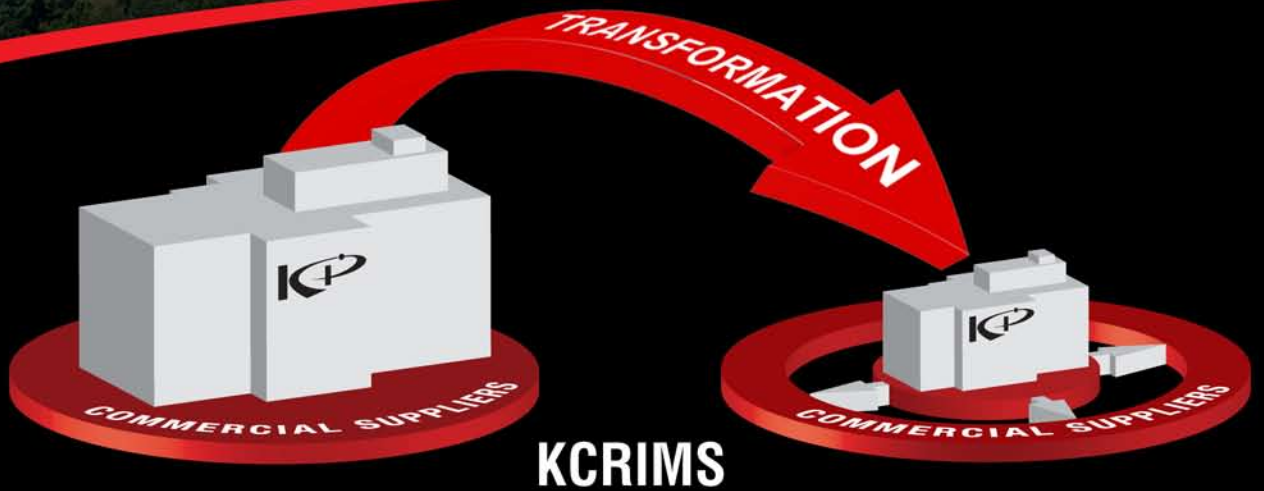




FY 2009

# KCP Ten-Year Site Plan



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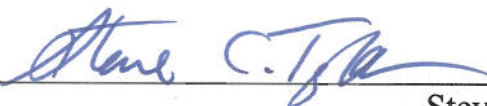
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**FY 2009**  
**Kansas City Plant**  
**Ten-Year Site Plan**


Prepared by  
**Honeywell Federal Manufacturing & Technologies**

**August, 2008**



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Manager  
National Nuclear Security Administration  
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## **Preface**

This Ten-Year Site Plan (TYSP) for the Kansas City Plant (KCP) has been prepared in accordance with the Ten-Year Site Plan (TYSP) Guidance for Fiscal Year 2009 – 2018, dated January 2008, with supplemental Appendix 1 (updated RTBF FYNSP table) dated February 2008. It contains the sections and attachments in the order specified in the guidance in which the requirements have been fully addressed in accordance with the guidance document.

This TYSP contains the plans and strategies in place to manage the facilities and infrastructure with available funds to support all assigned missions now and throughout the next ten years. Questions about the contents of this TYSP should be directed to the Points of Contact listed on page 9 of this document.

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## List of Abbreviations

ADAPT	–	Advanced Design and Production Technologies
AF&F	–	Arming, Fusing, and Firing
ATECC	–	Alternate Transportation Emergency Control Center
ATTC	–	Albuquerque Transportation & Technology Center
BFC	–	Bannister Federal Complex
BMP	–	best management practices
BTA	–	Building Technology Associates, Inc.
BTU	–	British Thermal Unit
CBDPP	–	Chronic Beryllium Disease Prevention Program
CD	–	Critical Decision
CME	–	Component and Material Evaluation
CMMS	–	Computerized Maintenance Management System
COTS	–	Commercial-Off-The-Shelf
CRADA	–	Cooperative Research and Development Agreement
DDC	–	Direct Digital Controls
DM	–	Deferred Maintenance
DMSMS	–	Diminishing Manufacturing Sources & Material Shortages
DoD	–	Department of Defense
DSA	–	Detonator Sensing Assembly
DSW	–	Directed Stockpile Work
DTRA	–	Defense Threat Reduction Agency
EA	–	Environmental Assessment
EIS	–	Environmental Impact Statement
EMP	–	Energy Management Plan
ENS	–	Emergency Notification System
EPH	–	East Powerhouse
ES	–	Enhanced Surveillance
ES&H	–	Environmental, Safety and Health
ESC	–	Enhanced Surveillance Campaigns
ESN	–	Enterprise Secure Network
FBI	–	Federal Bureau of Investigation
FEMP	–	Federal Energy Management Program
FIMS	–	Facilities Information Management System
FIRP	–	Facilities Infrastructure Recapitalization Program
FM&T	–	Federal Manufacturing & Technologies
FONSI	–	Finding Of No Significant Impact
FPU	–	First Production Unit
FYNSP	–	Future Years Nuclear Security Program
GPP	–	General Plant Projects
GSA	–	General Services Administration
GTS	–	Gas Transfer Systems
GWOT	–	Global War on Terror
HVPS	–	high voltage power supplies
IPSS	–	Integrated Programmatic Scheduling System
ISS	–	Institutional Site Support

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**List of Abbreviations (Cont.)**

IT	–	Information Technology
ITT	–	Integrated Telemetry Transmitter
IWPF	–	Industrial Wastewater Pretreatment Facility
JSOC	–	Joint Special Operations Command
JTA	–	Joint Test Assembly
KAFB	–	Kirtland Air Force Base
KCP	–	Kansas City Plant
KCP&L	–	Kansas City Power and Light
KCRIMS	–	Kansas City Responsive Infrastructure Manufacturing & Sourcing
KO	–	Kirtland Operations
KV	–	kilovolt
LAC	–	Lightning Arrestor Connector
LANL	–	Los Alamos National Laboratory
LEED	–	Leadership in Energy and Environmental Design
LEP	–	Life Extension Program
LI	–	Line Item
LLNL	–	Lawrence Livermore National Laboratory
LTS	–	Long Term Stewardship (Environmental)
M&O	–	Management and Operating (contractors)
M&S	–	Maintenance & Surveillance
MDNR	–	Missouri Department of Natural Resources
MEL	–	master equipment list
MEMF	–	Mobile Electronic Maintenance Facility
MSAD	–	Mechanical Safing and Arming Device
MSOP	–	Missouri State Operating Permit
MTE	–	Major Technical Element
NEP	–	Nuclear Explosive Package
NEPA	–	National Environmental Policy Act
NNR	–	Non-nuclear Readiness
NNSA	–	National Nuclear Security Administration
NPDES	–	National Pollutant Discharge Elimination System
NSMC	–	National Secure Manufacturing Center
NSSE	–	Network of Senior Scientists and Engineers
NWC	–	Nuclear Weapons Complex
NWSP	–	Nuclear Weapons Stockpile Plan
OCONUS	–	outside the continental United States
OMB	–	Office of Management and Budget
OPC	–	Other Project Costs
OST	–	Office of Secure Transportation
P&PD	–	Production and Planning Directive
PCB	–	Polychlorinated Biphenyl
PdM	–	Predictive Maintenance
PDRD	–	Plant-Directed Research and Development
POR	–	program of requirements
RAMP	–	Roof Asset Management Program
RCRA	–	Resource Conservation and Recovery Act

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**List of Abbreviations (Cont.)**

RFIC	–	Radio Frequency Integrated Circuit Value
RPV	–	Replacement Plant Value
RSF	–	rentable square feet
RTBF	–	Readiness in Technical Base and Facilities
SCMC	–	Supply Chain Management Center
SGT	–	Safeguards Transporter
SNL	–	Sandia National Laboratory
SPEC	–	Scientific/Process Equipment and Capabilities
SPFPA	–	Security Police and Fire Protection Association (Union)
SPMD	–	semi-permeable membrane device
TAR	–	Targeted Asset Review
TD	–	Transformation Disposition
TECC	–	Transportation Emergency Control Center
TRALOC	–	Training Logistics Command
TSRD	–	Top Secret Restricted Data
TYSP	–	Ten-Year Site Plan
UMP	–	Utilities Management Plan
VR	–	Virtual Reality
WFO	–	Work For Others
WPH	–	West Powerhouse
WR	–	War Reserve

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# Kansas City Plant Ten-Year Site Plan

## 1.0 Executive Summary / Future State

For more than 50 years, the National Nuclear Security Administration's Kansas City Plant (KCP) has served as one of our nation's foremost national security assets. Managed and operated by Honeywell Federal Manufacturing & Technologies, LLC, the Kansas City Plant manufactures a wide array of sophisticated, non-nuclear mechanical, electronic and engineered material components for national defense systems. These products comprise approximately 85% of the components that constitute a nuclear weapon.

With operations in Missouri, New Mexico and Arkansas, Kansas City Plant customers include the NNSA, DOE, national labs, DoD, other government agencies, United Kingdom and industry partners. The Kansas City Plant is recognized for its innovation, quality and safety performance. We support 40 technically demanding product families, including arming devices, microcircuits, polymers, plastics, and radars. We engage 90 advanced technologies, including concurrent engineering environments, laminates and optics.

Our unique expertise extends beyond the nuclear weapons complex to benefit national security, enhance the global competitiveness of U.S. businesses, and promote nonproliferation. Our Work for Others (WFO) program helps develop new processes and products for other governmental agencies. It also supports the NNSA's Complex Transformation vision through reduced (or eliminated) encumbrances of the nuclear weapon infrastructure, while continuing its symbiotic relationship with the KCP for complementary WFO, sharing best commercial practices and supplying excess manufacturing and engineering capacity when necessary.

This KCP Ten-Year Site Plan (TYSP) contains the status and planning of facilities, infrastructure, capital, construction, and capacity requirements for the KCP and Kirtland Operations (KO). The plans and cost projections in this TYSP reflect the activities necessary to achieve the goals set forth in the vision of the future nuclear weapons complex to transform into a smaller, safer and less expensive enterprise that leverages the technical and manufacturing expertise of our workforce and meets the national security requirements.

### Facility and Infrastructure Vision

Honeywell Federal Manufacturing and Technologies (FM&T) is transforming Kansas City Plant operations by significantly reducing annual operating costs and improving responsiveness to the National Nuclear Security Administration (NNSA) demand of non-nuclear components. The internal name for this project is "Kansas City Responsive Infrastructure Manufacturing and Sourcing" or KCRIMS. The initiative utilizes three interrelated thrust areas for change; strategic sourcing and sizing, business excellence facilitated by revised operating requirements, and a new modern facility sized for the future NNSA mission by the end of FY 2012.

The most visible component of KCRIMS is the acquisition of a new, modern, flexible manufacturing facility. While the current facility has served the mission well for the last six

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decades, the costs to maintain and reconfigure the facility in a responsive manner have become excessive relative to the costs of the primary production mission. The new facility will meet the future NNSA mission and will offer the advantages of flexibility and efficiency not currently available in the existing facility. Transition to KCRIMS is not without its share of challenges. The KCRIMS project has an active risk management program to plan, identify, grade and prioritize, handle and determine impact of project risks. A project risk manager oversees the program. Seven high, 33 moderate, and 13 low risks are currently managed to keep the project on track. High risks currently being handled are programmatic impacts of continuing resolutions, funding and support issues from design agencies for requalification efforts, changes in the political landscape that affect key decisions and funding, availability and alignment of funding needed to support KCRIMS build-ahead's and requalification's, and the effects of lengthy security clearance times.

Kirtland Operations (KO), independently and not related to KCRIMS, will be consolidated along with the Office of Secure Transportation (OST) into a new modern facility, the NNSA's Albuquerque Transportation & Technology Center (ATTC) to be constructed by a private developer and leased by the GSA. Construction is planned for completion in FY 2011 when Safeguards Transporter (SGT) refurbishments will also be transitioned from KCP to KO oversight. OST has authorized and funded a project team consisting of representatives from the Kirtland Operations and the Kansas City Plant including the OST federal program manager to lead the transition of SGT refurbishment operations from Kansas City to Albuquerque. The transition team is using the standard Honeywell transition process and holds regular team meetings in person and by teleconference to work through the transition process. Status updates on the team's progress are reported to management in conjunction with Kansas City's quarterly program reviews.

### **Facility Infrastructure Projects**

Because of the KCRIMS project, the whole state of funding and project planning is now based on only sustaining the existing building infrastructure until KCP operations are relocated to the new facility. A "Pause Plan" has been implemented whereby facility projects originally to be funded as Line Item projects, General Plan Projects (GPP), and Facilities Infrastructure Recapitalization Program (FIRP) projects have been "paused" (that is deferred or postponed indefinitely) rather than "cancelled." This means that a majority of the facility projects have been stopped, with a final determination being made on rescoping, rescheduling, or canceling these projects once GSA signs a lease for the new facility. As a result of this posture, the KCP will be relying primarily on RTBF funding to sustain operations; as no projects requiring Line Item, GPP or FIRP funding are planned. Projects will be developed to keep critical departments operational, but will shift from proactive and long-term in nature to a more reactive short-term response driven by immediate production needs. This philosophy is reflected throughout this TYSP as future minimal capital investment will be made in the existing facility consistent with Defense Programs strategy of reduced investment in facilities planned for disposition. Through FY 2012, the current facility will continue to support the NNSA mission.

### **Mission Transfers and Program Workload**

Under Complex Transformation, there are no plans to transfer significant mission elements to or from the KCP requiring facility infrastructure modification. New mission assignments requiring the introduction of new technologies at the KCP would provide their own infrastructure,

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including process equipment and air handling units. The timing of new assignments would need to be carefully analyzed to determine if it would be more economically feasible to establish the capability in the new facility, rather than having to relocate it at a later date. At this time, no new mission assignments have been identified.

In addition, there are no direct infrastructure change requirements driven by planned and potential program workload for the current facility. The infrastructure is currently in-place and no new modifications are necessary to accommodate workload through FY 2012, when relocation to the new facility will be complete. The current infrastructure will be maintained in support of the production planned for completion while remaining at the existing KCP.

### **Capability and Capacity**

The core mission of the KCP is to satisfy Directed Stockpile Work (DSW) requirements. Preparations and planning are underway to accommodate the transition from the current KCP facility to the new KCRIMS facility while satisfying DSW requirements. Because of the available capacity in the existing facilities the additional work required for build-ahead or requalification will not cause any major capacity issues. The latest capacity analysis using the FY 2010 budget forecast as its basis, shows that existing facilities are adequate for the current workload (FY 2008), and capacity is exceeded on a one-shift basis in only four manufacturing areas. Three of these can be accommodated by adding one shift, while one may require adding two shifts to meet this workload. No other action is required beyond these shift additions to meet the FY 2008 workload. Capability and capacity are adequate to support the current NNSA assigned mission through the current planning period. Workload and capacity will continue to be closely monitored to ensure that the sourcing and relocation transition does not negatively impact production schedules.

### **Maintenance**

Transition to a new facility requires an alternate strategy for maintaining the existing facility and equipment while maintaining the new facility during the transition years and beyond. The KCP plans to provide full maintenance support of Life Extension Program (LEP) production requirements and facility stewardship in the existing facility to meet safety and code compliance and central plant reliability throughout the transition to a new facility. Consistent with the Responsive Infrastructure Model document, non-critical equipment and systems will be evaluated and support levels will be adjusted to enable equipment life through LEP production at the existing facility through FY 2012. After FY 2012, maintenance support will shift to a “cold shutdown” state in the existing facility.

### **Deferred Maintenance (DM)**

With the planned relocation, no new Facilities Infrastructure Recapitalization Program (FIRP) projects will be started and FIRP funding has been reprogrammed to other sites. During the interim, the KCP has discontinued identification of new DM for the existing facilities where DM will continue to rise. This approach of minimal investment, allowing DM to grow, is consistent with the Defense Programs strategy to reduce investment in facilities planned for disposition. At the end of FY 2012, with the completion of relocation, maintenance requirements for the new facility will be minimal and items previously considered deferred will no longer be required.

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Upon completion of disposition, approximately \$230 million in DM, for the vacated facilities, will have been satisfied.

### **Disposition of Equipment and Property**

Planning for current facility disposition is in development. Manufacturing operations at the current location will cease in late FY 2012. Maintenance and surveillance activities necessary to maintain and prepare the vacated facilities for sale or transfer will continue through FY 2013, during which excess process equipment removal and facility preparations will be completed. To prepare the NNSA property for sale or transfer, a bounding case of possible improvements has been identified in this TYSP. It is envisioned that normal asset disposition processes and studies used by the General Services Administration (GSA) will be employed. Disposition of NNSA property on the NC-135 Site is currently in planning and will be completed once KO is consolidated into the ATTC.

### **Long Term Stewardship (LTS)**

Long term stewardship includes those activities necessary to protect public health and the environment from site hazards. Activities include monitoring, maintenance, institutional and engineering controls, information management (including records maintenance) and other activities to ensure that implemented clean-up remedies remain effective over time.

Environmental clean-up activities at the existing site have, and continue to be, mandated by the Resource Conservation and Recovery Act (RCRA). The KCP has a RCRA Missouri Hazardous Waste Management Facility Part I Permit administered and overseen by the Missouri Department of Natural Resources. The permit mandates the components of the LTS program described in this TYSP. NNSA currently forecasts \$2 million average cost per year for LTS activities, such as groundwater monitoring and treatment.

### **Expected Future State**

The KCRIMS program is a commitment to deliver a smaller, safer, and less expensive enterprise that leverages the technical and manufacturing expertise of our workforce and meets the national security requirements. The new KCRIMS facility will offer more operational efficiency and also provide the flexibility necessary to quickly meet changing production requirements. It will support the design requirements of the LEPs and other future weapons programs without the burden of maintaining excess capacity and obsolete capabilities. Capabilities that are commercially available will be outsourced where possible and remaining in-house capabilities will be properly sized for the anticipated production rates of future weapon programs. The KCP Work for Others program will continue to be part of the overall KCP business model because of the critical need for secure engineering and manufacturing services that the KCP provides.

A summary of the footprint reductions planned through the KCRIMS project and KO consolidation that will contribute to overall complex footprint reduction are presented in Figure 1 – Gross Square Footage Summary Table and Figure 2 – NNSA Weapons Activities Account Footprint on the following pages.

## Kansas City Plant – Gross Square Footage Summary Table

	Site GSF Baseline (gsf) - Based on FIMS Snapshot taken at end of FY2005	Net Change in GSF from FY06 through FY07 - Based on FIMS Snapshot taken at end of FY2007	Cumulative Changes from Start FY2008 to End FY2018		Projected Footprint at end of FY2018 (gsf)	Change from Start of FY2006 to End of FY2018 (gsf)
			Cumulative Additions (Construction, New Leases, Transfers) (gsf)	Cumulative Reductions (Disposition, Sale, Transfer, Lease Termination) (gsf)		
<b>OWNED GROSS SQUARE FOOTAGE</b>						
Weapons Activities Account Owned	2,930,646	53,699	0	-2,974,720	9,625	-2,921,021
Other NNSA Owned (NA-20)	0	0	0	0	0	0
Other DOE Owned	0	0	0	0	0	0
Non-DOE Owned	0	0	0	0	0	0
<b>Total</b>	<b>2,930,646</b>	<b>53,699</b>	<b>0</b>	<b>-2,974,720</b>	<b>9,625</b>	<b>-2,921,021</b>
<b>LEASED GROSS SQUARE FOOTAGE</b>						
Weapons Activities Account Leased	283,952	0	1,107,450	-279,855	1,111,547	827,595
Other NNSA Leased (NA-20)	0	0	0	0	0	0
Other DOE Leased	0	0	300,150	0	300,150	300,150
Non-DOE Leased	0	0	0	0	0	0
<b>Total</b>	<b>283,952</b>	<b>0</b>	<b>1,407,600</b>	<b>-279,855</b>	<b>1,411,697</b>	<b>1,127,745</b>
<b>OWNED &amp; LEASED GROSS SQUARE FOOTAGE</b>						
Weapons Activities Account Owned & Leased	3,214,598	53,699	1,107,450	-3,254,575	1,121,172	-2,093,426
Other NNSA Owned & Leased (NA-20)	0	0	0	0	0	0
Other DOE Owned & Leased	0	0	300,150	0	300,150	300,150
Non-DOE Owned & Leased	0	0	0	0	0	0
<b>Total</b>	<b>3,214,598</b>	<b>53,699</b>	<b>1,407,600</b>	<b>-3,254,575</b>	<b>1,421,322</b>	<b>-1,793,276</b>

**Figure 1 – Gross Square Footage Summary Table**

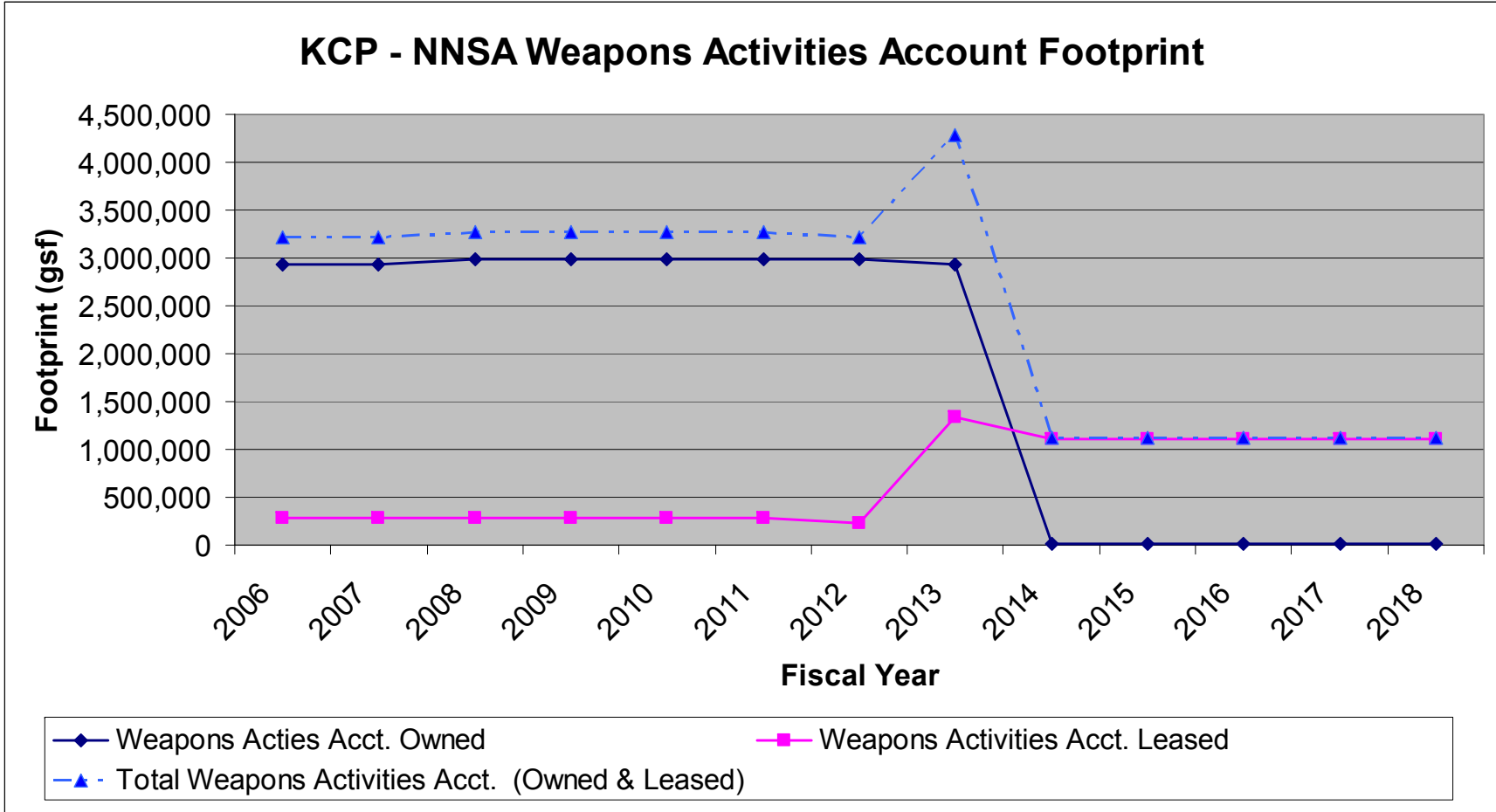


Figure 2 – NNSA Weapons Activities Account Footprint

## 2.0 Assumptions

The plans and data provided in this TYSP are consistent with the references identified in the FY 2009-2018 TYSP Guidance provided by the NNSA in January 2008. Any deviations from these references are cited in the text. In addition, the key assumptions underlying the programmatic, budget and planning assumptions and constraints including anticipated transformation assumptions contained in this TYSP are as follows.

- Site Boundaries: Boundaries of NNSA controlled property in the Bannister Federal Complex (BFC) will change upon completion of KCP relocation to the new KCRIMS facility in late FY 2012 when 231,233 gross square feet of GSA assigned leased floor space will be returned to the GSA. NNSA owned property at the BFC (2,925,516 gross square feet floor space on 136.1 acres) will be commercially sold or transferred through GSA currently anticipated for late FY2013. Boundaries at the new KCRIMS site are being defined by the KCRIMS project. See KCP Attachment E for additional detail. KO will vacate 48,622 gross square feet of leased space (Craddock and Air Park) and 49,204 gross square feet of NNSA owned floor space at the permitted NC-135 Site. Remaining permitted NC-135 Site acreage for NA-40 use will be defined during disposition planning currently in progress. See KO Attachment E for additional detail.
- Replacement Plant Value: RPV for NNSA owned property at the BFC will be maintained as currently specified in FIMS until disposition by commercial sale or transfer through GSA is complete currently anticipated for late FY 2013. RPV for NNSA owned property at the NC-135 Site will be maintained as currently specified in FIMS until disposition is complete with planning currently in progress.
- Deferred Maintenance: KCP recapitalization projects have been deferred indefinitely due to the planned KCRIMS project. DM for NNSA owned property at the BFC will continue to increase until KCP relocation to the new KCRIMS facility is complete in late FY 2012. After relocation, DM will be reduced to those items associated with maintaining the unoccupied real property (see Attachment F-2). KO has no DM at this time.
- Facility Funding: Funding levels provided in the Future Years Nuclear Security Program (FYNSP) for KCP RTBF are adequate throughout the current FYNSP period provided that Institutional Site Support (ISS) requests are granted for facility preparation in support of transformation. Driven by KCP Transformation planning and the KCRIMS program, projects not required to support LEP completion or maintain critical infrastructure elements, have been deferred or postponed indefinitely per the Pause Plan. Paused projects, identified on Attachment A in the FY2008 TYSP and newly paused projects have not been included in the FY 2009 TYSP Attachment A tables and have been taken out of the budget forecast. With implementation of the KCRIMS project, requirements driving these projects will be eliminated.
- Budget Constraints: The NNSA Facilities and Infrastructure Cost Projections (Attachment A) adhere to the budget targets established in the FYNSP with the exceptions as noted in the Facility Funding paragraph above and Disposition Planning paragraph below.

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- Transformation Planning: Current project plans continue to show the new facility completion in December 2010. Facility completion dates will be finalized when a completion date is established with the developer. Once the completion date is established, a fully occupied date will be established. Preliminary planning of the relocation effort has resulted in a new estimate that shortens the duration of relocation from 24 to 18 months. Current plans forecast the new KCP facility to be completed in late 2010 and become fully operational in late 2012. This schedule is tight, but is achievable. The infrastructure and operations in the existing facility will only be sustained for production until 2012. The existing facility will be maintained in a capable state through 2013, after which the property will be excess to NNSA.
- Disposition Planning: Manufacturing operations at the BFC location will cease in late FY 2012. Maintenance and surveillance activities necessary to maintain and prepare the vacated facilities for sale will continue through FY 2013 during which excess process equipment removal and facility preparations will be completed. To prepare the NNSA owned BFC property for sale, a bounding case of possible improvements is identified in this TYSP (Section 4.2.5, Disposition Planning). The estimated cost for these improvements has been budgeted. When the scope of improvements and required facility preparations for sale are determined, the forecasted costs will also be budgeted. It is envisioned that normal asset disposition processes and studies used by the General Services Administration (GSA) will be employed.
- Security: Remaining at a Design Basis Threat Level 4 designation, the KCP security program is tailored like an industrial security program based upon the KCP Site Security Standard.
- Directed Stockpile Work: Current issues of Production Control Documents for each weapon in the enduring stockpile were included in the Integrated Programmatic Scheduling System (IPSS) in accordance with the Nuclear Weapons Production and Planning Directive (P&PD), 2008-0, dated January 2008. This is the basis for the workload assumptions used in this TYSP.
- Environmental Safety & Health (ES&H): The KCP continues to operate within the established thresholds for Energetic Material, Radiological Material, and Hazardous Chemicals and in compliance with the approved operating requirements. In addition, the KCP will continue the transition to an industrial model.
- Environmental Long Term Stewardship (LTS): The Environmental LTS program is the responsibility of NNSA's Office of Environmental Projects and Operations, NA-56, in FY 2009 thru FY 2013. It is believed that full target funding in the amount of \$2.8 million for FY 2009 will be received as requested in the approved Annual Work Plan.
- Leadership in Energy and Environmental Design (LEED) Certification: The new KCRIMS facility will be LEED *Gold* Standard certified (see Attachment C and Energy Management in Section 4.1.2).
- Kirtland Operations (KO): Kirtland Operations' activities located in Albuquerque will be consolidated along with the Office of Secure Transportation (OST) within the NNSA's



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Albuquerque Transportation & Technology Center (ATTC) to be constructed by a private developer and leased by the GSA. Construction will be completed in FY 2011. OST will have primary site responsibility for the ATTC which will be reported in their TYSP. In addition, Safeguards Transporter (SGT) refurbishments will be transitioned to KO oversight into the ATTC in FY 2011. Safeguards Transporter (SGT) new builds will be completed at the KCP as currently planned, also in FY 2011. With KO consolidation into the ATTC, the existing NC-135 Site on Kirtland Air Force Base (KAFB) will be vacated with the exception of the real estate containing buildings 133, 134, 135, 136 and P1 to be permitted by the Air Force to NNSA for Office of Emergency Management (NA-40) use. Definition of the remaining NC-135 Site will be detailed in future TYSPs.

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### 3.0 Mission Needs / Program Descriptions

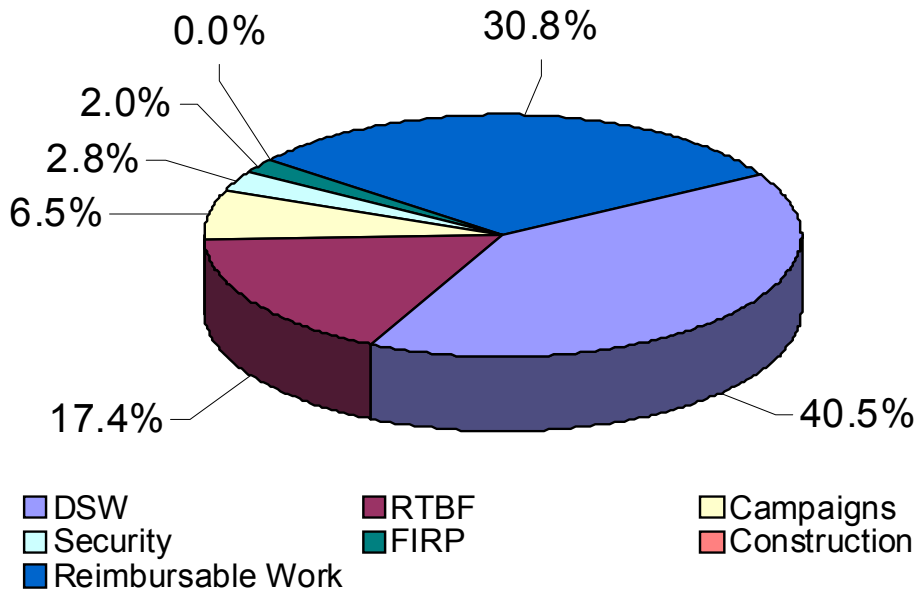
#### 3.1 NNSA Missions, Programs and Workload

The KCP provides a broad array of products and services which are closely aligned with current and future efforts of the NNSA to ensure the safety and reliability of the nuclear stockpile. KCP manufactures many of the NNSA’s most intricate and technically demanding products, including radars, programmers, reservoirs, joint test assemblies, trajectory sensing signal generators, and mechanical cases. These products comprise approximately 85% of the components that constitute a nuclear weapon.

To accomplish its mission, the KCP directs resources into specific business areas consistent with NNSA authorizations and funding:

- DSW
- Campaigns
- RTBF
- Security Programs
- Reimbursable Work

Figure 3 shows the mission allocation in FY 2008 for each of these categories.



**Figure 3 – KCP Mission Allocations for FY2008 by Budget Category**

These mission areas are detailed below. Additionally, the NNSA missions associated with the Kirtland Operations (KO) are separately described because of the additional facility and infrastructure required. The final section will address the KCRIMS program to transform the KCP consistent with the NNSA transformation effort.

### 3.1.1 NNSA Directed Stockpile Work (DSW)

The core mission of the KCP is to satisfy DSW requirements, which for the KCP include non-nuclear products and services to support stockpile maintenance, refurbishment, stockpile evaluation, maintenance and logistics, and dismantlement.

The KCP is the main NNSA production site for non-nuclear weapon products:

- Electrical-electronic products provide weapon command and control, arming signals and detonating energy, as well as collecting and reporting weapon performance data during simulated deployment tests.
- Weapon structural products and component containers are manufactured from engineered materials such as plastics, composites or from a variety of metals.
- Reservoirs, actuators, and items in the Nuclear Explosive Package (NEP) perform in the weapon explosive sequence and provide survivability during storage and usage situations.

The Production and Planning Directive (P&PD) 2008-0, dated January 2008, is the basis for workload assumptions and budgetary inputs. The President has not yet signed the Nuclear Weapons Stockpile Plan (NWSP), so stockpile quantities beyond FY 2008 are provided for planning purposes. Once the NWSP is signed, P&PD 2008-0 may be updated.

The currently approved mission and programs continue the reliance on maintaining the stockpile through planned refurbishment programs and LEPs. See Figure 4 for a summary of NNSA refurbishment guidance and Figure 5 for the KCP workload summary based on the guidance.

The KCP is committed to meeting the challenges of the future. Fulfilling the primary DSW mission will require creative engineering, manufacturing, management and program management to successfully support refurbishment and stockpile modernization in a period of remarkable change. The following list highlights workload expectations and their impact on the stockpile modernization effort:

- Production driven by the W76-1 and the B61 refurbishments:
  - Ramp-up and rate production of W76-1 requires broad scope of non-nuclear work including firing systems, stronglinks, plastics and metal products, cables, valves, new surety features, and telemetry upgrades
  - B61-3/4/10 refurbishments require radar nose, electrical assemblies, plastic products, and cables
  - B61-7/11 requires radar nose, electrical assemblies, plastic products, and cables
- Sustained focus on new product and process technologies in partnership with design agencies to:
  - Provide production readiness for new weapon surety features and Gas Transfer System (GTS) features
  - Assure successful application of commercial-off-the-shelf (COTS) electronic components
  - Improve flight testing surveillance with less intrusive telemetry and reduced sensor dimensions plus expanded diagnostic functions

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- Design modernization of telemetries beginning with the W88
- Achieving a balance between the DSW workload and available funding
- Maintaining effective alliances with diverse supplier base to avoid interruptions in production and assure readiness for future life extensions

### **Breakdown of Current Mission in FYNSP Period**

#### **Stockpile Maintenance**

During the FY 2009 through FY 2014 FYNSP period, the following major stockpile maintenance efforts are or will be under way:

- Ongoing reservoir production for B61, B83, W76, W78, W80, W87, and W88
- Commercial forging shelf life support for all programs
- W68, W76-0, and W79 dismantlement
- Ongoing schedule support of W76-1
- Completion of B61 Alt 356, 357, 358, and 359
- Development and preproduction of products for the B61 non-nuclear refurbishment

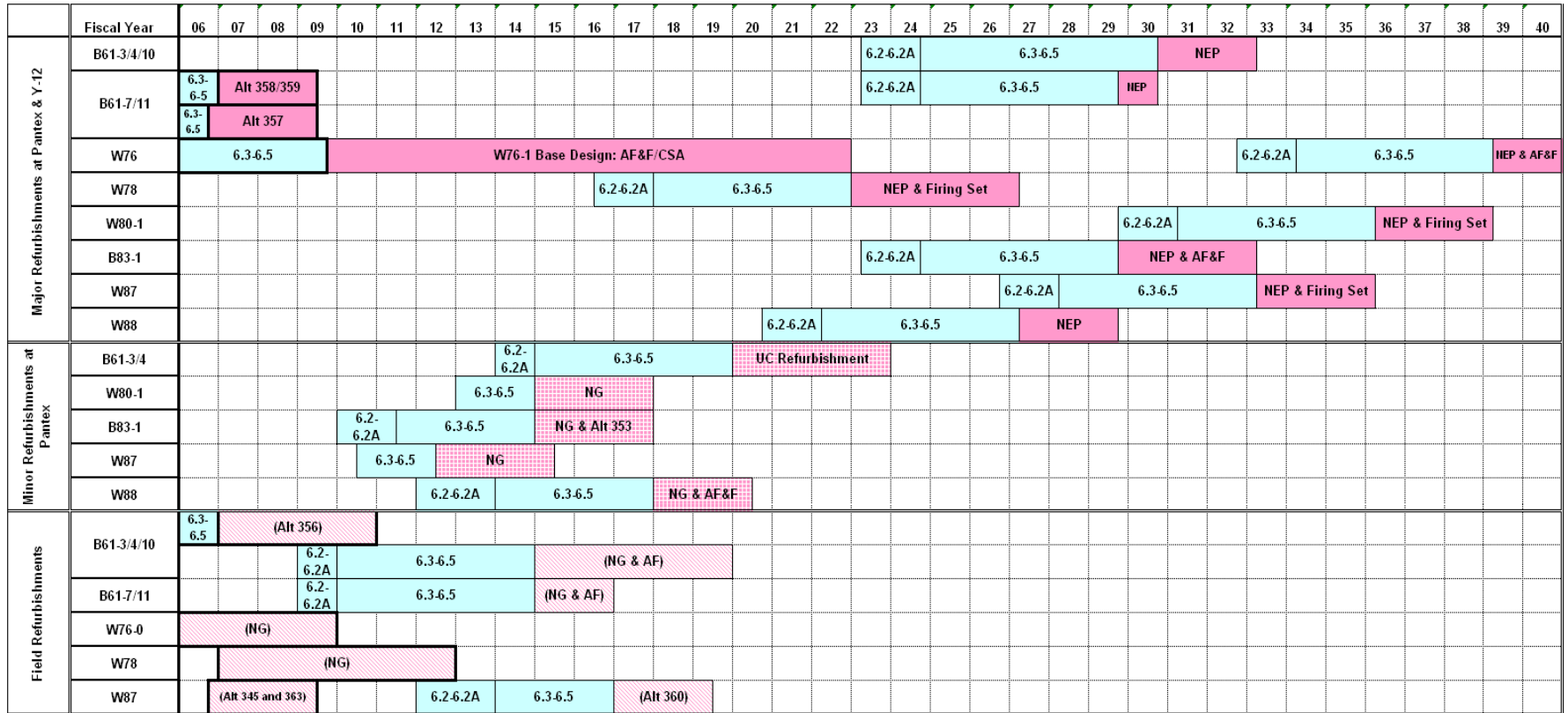
#### **Stockpile Evaluation**

Stockpile Evaluation mission assignments include the following program activities:

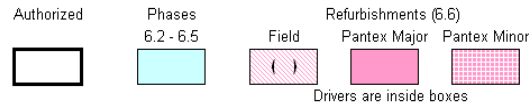
- Production of telemetry systems and other associated Joint Test Assembly (JTA) items for the B61, W76, W78, W80, B83, W87, W87 JTA4, and W88 to support approximately 36 weapon system flight tests per year
- B61-3/4/10 rebuild product deliveries
- W87 rebuild requirements for the MC3719 Firing Set, Mechanical Safing and Arming Device (MSAD), and E-Assembly production
- Implementation of W88 telemetry Testworks
- Providing approximately 8 sets of test bed hardware expendables annually for each stockpile program

#### **ASK Program**

The ASK program is a new DSW production assignment the NNSA identified in 2007 to develop and produce a new transceiver for an unspecified customer. Production is planned to begin in FY 2011 and continue for three years. The current effort requires 1,950 square feet of dedicated production space, but has the potential to result in additional similar products over a greater period of time.



As of January 25, 2008



Dates for Field refurbishments represent deliveries of kits to DOD, and dates for Major and Minor Pantex refurbishments represent delivery of refurbished weapons to DOD. Non-authorized activities represent our best current estimate.  
 Alt 356 replaces spin rocket motors in the B61-3/4/10s; Alt 358 and 359 replace spin rocket motors in the B61-7 and B61-11, respectively.  
 Alt 357 is the life extension program for the B61-7/11.  
 Alt 353 replaces the gas transfer system (GTS) on the B83 Readiness State-1 and Readiness State-2 bombs, only.  
 Alt 345 GTS deployment was completed on the required W87 warheads in early FY 2003; Alt 345 will restart with deployment of W87s on Minuteman III (SERV configuration).  
 Alt 363 changes fire set assembly covers on W87s prior to deployment on Minuteman III (SERV configuration).  
 Alt 360 replaces the GTS on W87s.  
 B61-3/4 UC Refurbishment - potential alternatives include CONUS field replacement.

Figure 4 – NNSA Refurbishment Plan (Driver for Work Assignments to the KCP)

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Program	Replace/New	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	Comments
B61-3/4	Arming & Fuzing Refurbishment: Nose, Radar, Programmer, Foam Supports, Pads, Cables Preflight Cases and Hardware			6.3-6.4				Production					
	Use Control refurbishment								6.3-6.4				
		Production											
B61-7/11	Foam Supports, Cushions, Cables, Getter, Refurbished Case, Nitrogen Cartridge	Prod.											
	Arming & Fuzing Refurbishment: Nose, Radar, Programmer, Foam Supports, Pads, Cables Preflight Cases and Hardware			6.3-6.4				Production					
		Prod.											
W76-1	AF&F, Acorn, Cables, Filled Elastomers, Valve, Pads, & Cushions, Getters, Seal Cover, Foam Supports, Tapered Tapes, Misc Metal Parts.	Production											Production continues through 2021
W78	NEP components, Firing Set											6.3-6.4	
W80-1	Components for NG replacement												
B83-0/1	Valves, Reservoir, Brackets, Tubes, Cable				6.3-6.4			Production					
W87	Acorn, Cable, Tube							6.3-6.4		Production			
W88	New GTS	6.3-	Production										
	Refurbished AF&F, NG Components							6.3-6.4		Production			

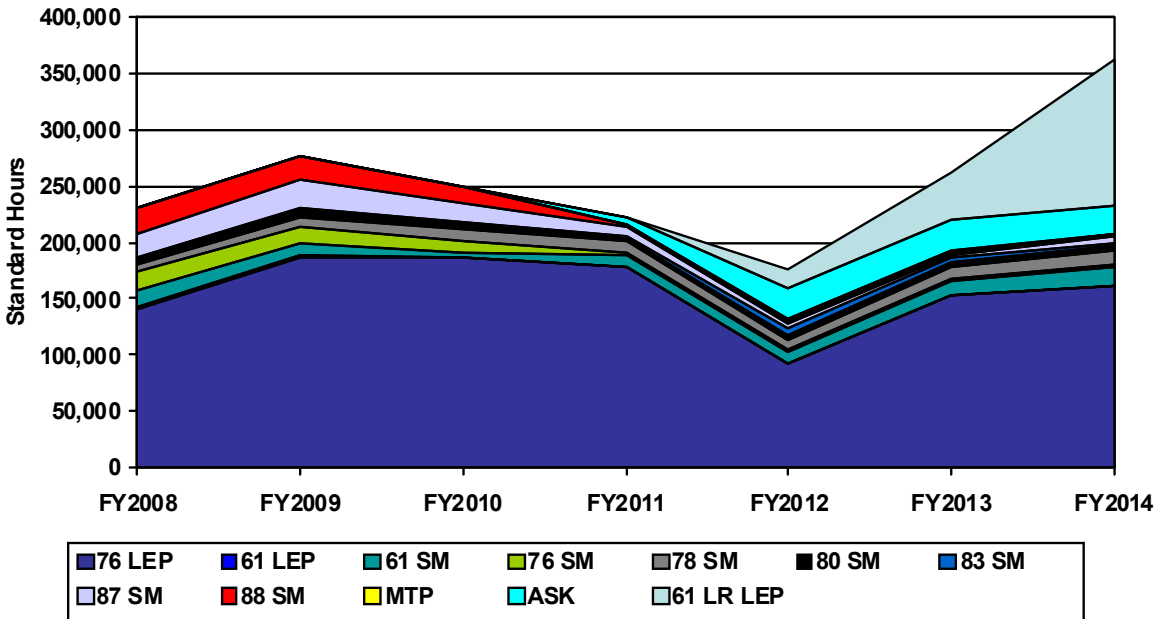
**KCRIMS Build Ahead and  
Relocation Transition Period  
FY2007-2012**

NOTES: (1) All programs require on-going JTA support and some have Telemetry redesigns  
 (2) All programs require ongoing replacement of limited life components, primarily reservoirs  
 (3) Production period, rate, scope or funding has not been identified at this time

**Figure 5 – KCP Weapon Refurbishment Summary**

**KCP Labor Content**

As shown below, in Figure 6, the labor content for directed stockpile work shows some decline through FY 2012 followed by a modest increase FY 2013 and later. The decline through FY 2012 is due in part to initial efforts to rephase steady state production of the W76-1 and stockpile systems programs to establish prebuild inventory required for stockpile deliveries during the planned KCRIMS transition period of FY 2011-2012. Additional re-scheduling efforts will result in a more significant reduction for FY 2011-2012 in subsequent plans. Beginning in FY 2012, the increasing trend is driven by the production requirements for the B61 non-nuclear refurbishment program and the new ASK program.



**Figure 6 – DSW Labor Content by Program**

**The KCP Workload**

A capacity analysis was conducted using the latest FY 2010 budget forecast as the basis. This study shows that existing facilities are adequate for the current workload (FY 2008). There are four manufacturing areas where capacity is exceeded on a one-shift basis. These are Printed Wiring Assembly Fabrication, Final Assembly (Clean Bench), Plastics Machining, and Electromechanical Assembly. The first three of these can all be accommodated by adding shifts since their capacity overages are in the 5–10 percent range. Electromechanical Assembly requires two shifts to meet this workload. No other action is required beyond these shift additions to meet the FY 2008 workload.

Current utilization is below 20 percent capacity in five process areas, including two, which are dedicated to supporting field return material. Major reasons for these low utilization levels is the cancellation of the First Production Unit (FPU) on the W80 LEP program as well as the build-out of other products. The level of utilization remains fairly constant in the future for the three remaining areas, except Mechanical Welding, which increases to approximately 30 percent.



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Because of the KCRIMS initiative, no further consolidation of manufacturing areas within the current facilities is planned. Current manufacturing capabilities need to remain in place to support the sourcing decisions from the KCRIMS effort – either to support product that will continue to be made in-house; or in a transitional state until an outside vendor has been secured, qualified, and able to support production schedules.

Long-term workload changes and resulting capacity implications are further addressed in the next section.

### **Workload Impact to Facilities and Infrastructure**

Because of the KCRIMS initiative, there are no direct infrastructure requirements driven by planned and potential program workload for the current facility. The primary objective is to maintain the current infrastructure in support of the production to be completed in the existing facility. That infrastructure is currently in-place and no new modifications are necessary to accommodate workload through FY 2012, when relocation to the new facility will occur.

New mission assignments requiring the introduction of new technologies at the KCP would provide their own infrastructure, including process equipment and air handling units. The timing of these new assignments would have to be carefully analyzed to determine if it would be more economically feasible to establish that capability in the new facility rather than relocating it at a later date. At this time, no new mission assignments of this magnitude have been identified.

The KCP conducted a capacity study, based on P&PD (2007-0). The P&PD is issued by NNSA-HQ and authorizes all program work. Weapon schedules and monthly delivery rates are developed based on the P&PD to support the ultimate user.

This long-range capacity study determined the percentage of direct labor capacity utilized in each manufacturing area for the six-year period from FY 2008 to FY2013. This workload is detailed in Figure 7 and illustrates the peak capacity utilization for each product/process area and the year(s) in which it would occur. The headcount capacity for each area is based on a one-shift operation. Areas shown in yellow and red are those where 100 percent capacity would be exceeded on one shift. Adding a second shift can generally accommodate those capacity shortfalls shown as yellow (100 – 166 percent). Those areas showing red would require more than two shifts.

Electromechanical Assembly is the only area shown in red. The FY 2008 and FY 2009 workload can be mostly accommodated with two shifts. The workload shown in FY 2013 will require part of a third shift to satisfy this demand.

Generally, in the future, the capacity utilization in nearly every manufacturing area is essentially flat. This is a result of the steady-state refurbishment schedules and no new programs having to be supported. As compared to previous capacity studies, the utilization has decreased in most areas. This is a direct result of the cancellation of the W80 LEP FPU as this program was a large contributor to the plant workload. Prior planning at the KCP called for both the W76 LEP and W80 LEP to be manufactured concurrently. While the W80 cancellation has caused the utilization to decrease in most of the manufacturing areas, there are no current plans to downsize them or further consolidate operations in place. Instead, consolidation and downsizing will occur through KCRIMS.

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Workload and schedules for build-ahead or requalification quantities required for relocation to the new facility are estimated in the KCRIMS costs but have not been fully implemented in our scheduling system. To date, as schedules are being adjusted, consideration is being given to capacity limitations and staffing concerns. More capacity will also become available in certain areas as sourcing efforts are implemented. Because of these factors, it is not anticipated that this additional work will cause any major capacity issues. As relocation planning is further developed, workload requirements and build aheads will be revised accordingly.

The workload/capacity issue will continue to be closely monitored to ensure that adequate capacity will be available in the new facility. In addition, the sourcing and relocation transition will be reviewed to minimize any negative effect that it may have on supporting production schedules.

KCP Site Capacity Assessment

Product/Process Line	% of Capacity Utilized	Peak FY(s) For Workload	Remarks	FY08	FY09	FY10	FY11	FY12	FY13
<b>ELECTRICAL</b>									
MICROMINIATURE ELECTRONICS	35%	FY2009		26%	35%	34%	16%	11%	2%
SEMICONDUCTOR PACKAGE ASSY.	39%	FY2008, FY2009		39%	39%	33%	31%	8%	6%
PRINTED WIRING ASSEMBLY FAB.	126%	FY2010	Multiple shifts will increase capacity	106%	125%	126%	121%	59%	25%
CABLE FAB	29%	FY2009		21%	29%	23%	22%	20%	20%
LAC FAB.	70%	FY2010		64%	68%	70%	52%	60%	58%
DETONATOR CABLE FAB.	98%	FY2009		93%	98%	63%	29%	12%	16%
DETONATOR CABLE ASSY.	92%	FY2008		92%	53%	44%	36%	5%	9%
CABLE ENCAPSULATION	38%	FY2009		33%	38%	23%	20%	18%	18%
FINAL ASSY. (CLEAN BENCH)	151%	FY2010	Multiple shifts will increase capacity	103%	148%	151%	119%	65%	100%
RADAR NOSE ASSY.	1%	FY2008 - FY2013		1%	1%	1%	1%	1%	1%
FINAL ASSY. (RH-CONT./PLANT ENV.)	15%	FY2009, FY2010		12%	15%	15%	14%	8%	13%
TSD MODULE FAB	22%	FY2008		22%	18%	18%	13%	2%	2%
FINAL ASSY. (CLEAN)- HMC/RADARS	67%	FY2013		24%	37%	35%	35%	31%	67%
AFT SUB ASSY.	54%	FY2009		46%	54%	48%	46%	30%	50%
WELDING & ENCAPSULATION	102%	FY2011	Multiple shifts will increase capacity	59%	89%	90%	102%	39%	68%
<b>MECHANICAL</b>									
MECHANICAL MACHINING	42%	FY2008, FY2009		42%	42%	40%	27%	30%	30%
ELECTROMECHANICAL ASSY.	212%	FY2013	Multiple shifts will increase capacity.	173%	173%	154%	143%	144%	212%
MECHANICAL WELDING	29%	FY2010		17%	24%	29%	24%	22%	2%
SHEET METAL FAB. & ASSY. (H-GEAR)	4%	FY2008		4%	1%	1%	2%	1%	1%
HEAT TREAT	37%	FY2008, FY2009		37%	37%	32%	35%	22%	23%
RESERVOIR FABRICATION	95%	FY2009		80%	95%	81%	56%	50%	89%
CASE ASSY.	6%	FY2011		4%	5%	5%	6%	5%	1%
PLASTICS MACHINING	110%	FY2009	Multiple shifts will increase capacity	104%	110%	108%	79%	26%	79%
FOAM PRODUCTS/DESICCANTS/POLY	37%	FY2008		37%	31%	32%	36%	10%	24%
PLASTIC MOLDING & FILLED ELAST.	72%	FY2008		72%	43%	38%	41%	11%	19%
CELLULAR SILICONE	27%	FY2008		27%	20%	21%	17%	7%	17%
PLATING	41%	FY2008		41%	19%	0%	0%	0%	0%
PAINTING	93%	FY2008		93%	78%	61%	39%	43%	42%
OST FABRICATION	65%	FY2009		58%	65%	63%	49%	30%	25%

Figure 7 – KCP Capacity Assessment

### 3.1.2 Campaigns

The Campaigns program funds five major technology activities that are critical to DSW support: Plant-Directed Research and Development (PDRD), Advanced Design and Production Technologies (ADAPT), Non-nuclear Readiness (NNR), Pit Manufacturing, and Enhanced Surveillance (ES). Each area supports the KCP mission and each plays a vital role in meeting NNSA’s future expectations. Figure 8 illustrates the interrelationship among these activities and to DSW and RTBF.

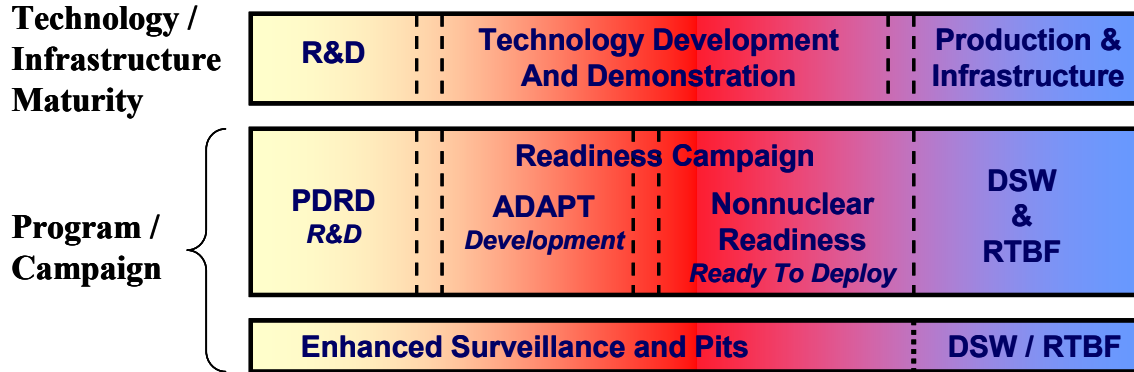
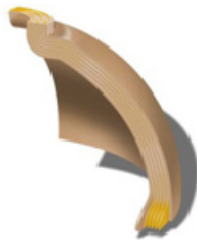


Figure 8 – Technology Activities Provide Affordable Manufacturing Capabilities for DSW

#### Plant-Directed Research and Development (PDRD)

The PDRD program focuses on advanced technology development that supports the NNSA mission.



Freeform Capacitor Concept

PDRD Project: Proof of concept study to fabricate ceramic capacitors using rapid prototyping techniques.

The projects funded by PDRD are “research and development” in nature. If successful, the concepts demonstrated by these projects can be developed further through ADAPT or Enhanced Surveillance and matured to production readiness in NNR. It is expected that ADAPT, Enhanced Surveillance and NNR projects are customer driven and will therefore be deployed and maintained by DSW and RTBF.

An annual PDRD “Call for Proposals” process focuses on technology categories that address technological capabilities strategic to the KCP mission. A two-tiered review and selection process identifies the highest priority PDRD projects for the plant. The PDRD Steering Committee, comprised of all five KCP members of the Network of Senior Scientists and Engineers (NSSE), and selected technical and program managers, recommend projects to senior management and subsequently to the KCSO for concurrence. Criteria established by KCP management for PDRD project selection include creativity and innovation, technical impact,

programmatic soundness, and resources including partnerships with universities and other entities.

PDRD strongly helps to maintain critical technical skills by providing the opportunity for the KCP technical staff to interject creative new concepts into technology development. Approximately 150 KCP associates per year participate in PDRD projects.

### **Readiness Campaign**

The Readiness Campaign assures that materials are available, processes are designed and established and manufacturing capabilities are available to meet nuclear weapon alteration, refurbishment, and other stockpile stewardship activities. Through ADAPT and NNR (two subprograms of the Readiness Campaign), technologies are developed, matured, and demonstrated to provide turn-key insertion to DSW requirements. ADAPT projects bring lesser mature technologies to war reserve (WR) -capable demonstration and NNR further matures the technologies to provide robust, right-scaled capabilities. Capacity is not provided by the campaigns but is the responsibility of the DSW or RTBF customer.

### **Advanced Design and Production Technologies (ADAPT)**

ADAPT activities develop new processes and manufacturing capabilities that support stockpile refurbishment, limited life components, LEPs, current production and support the design laboratories by having these capabilities available for them to procure test hardware during the qualification and surveillance phases of weapon life. ADAPT provides tools and processes to ensure that the KCP can deliver affordable non-nuclear components to all NNSA schedules. ADAPT promotes collaboration for concurrent assessment of manufacturability with design laboratories.

ADAPT provides challenging technical work for about 80 KCP technical employees per year, and thereby helps maintain critical skills. The product and process engineers work early in the design phase with their laboratory counterparts to influence the design. This concurrent engineering activity strives to lower product costs and provide designs that are easier to build. The work benefits pre-production engineering and optimizes the transition to DSW production engineering.

ADAPT focuses on developing new manufacturing processes, reviving dormant processes, and identifying and characterizing alternate materials and components as the existing ones become commercially scarce or unavailable. Major activities include: developing manufacturing processes to ensure that the W76-1 Arming, Fuzing, and Firing (AF&F) can meet rate production, as well as processes for manufacturing replacement or refurbished parts for the W76; developing manufacturing aids and tooling concepts using modern science-based approaches; developing manufacturing processes for limited life components to provide manufacturing improvements on gas transfer systems, 2nd suppliers for lightning arrestor connectors (LAC) and detonator cables; developing manufacturing capabilities to build advanced electrical and electromechanical systems for future nuclear weapon refurbishments; developing techniques and capabilities for miniature metal assemblies; developing microelectronic technology for advanced telemetry; and developing processes for manufacturing and testing of new command and control products.



LAC

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ADAPT also develops, tests, and validates 3-D model-based tools and processes for designing, engineering, manufacturing and accepting weapon components. The tools generate product and process knowledge critical for delivering manufacturable designs and high quality products that require fewer prototype units.

### Non-nuclear Readiness (NRR)

Non-nuclear Readiness (NRR) is a technology scale-up and demonstration program that moves new design, manufacturing and information technologies to the production environment in support of WR activities. BMI (bismaleimide) was scaled-up from a 4 gallon to a 50 gallon process in support of removable epoxy materials. Participants in NRR include Sandia National Laboratory (SNL), Los Alamos National Laboratory (LANL) and the KCP. For the past year, the primary emphasis for NRR was capabilities to assure that the W76-1 LEP production was sustainable and affordable after achieving the first production unit. The emphasis for the next few years is technology to reduce footprint and capabilities critical for transformation, future systems, and other national security needs.



BMI Scale-up



VR Work Cell

NRR also provided the secure, high-speed computing infrastructure for the KCP to collaborate and efficiently transact WR business with other sites. Major activities included development of the computing infrastructure for secure data exchange and interactive engineering collaborations.

NRR projects areas are required to address three critical business needs and have a positive impact on each during project execution:

- **Readiness of Production Technology:** Readiness of production technology advances deployment of new manufacturing processes required for the next-generation weapon systems in the factory at the KCP. These production technologies improve the operability and sustainability of the manufacturing enterprise. Production and development process enhancements improve the ability to quickly respond to requirements.
- **Readiness of Production Operations:** Readiness of production operations involves a broad spectrum of activities including obsolete test equipment replacement and consolidation, analytical laboratory and metrology capabilities, improvements to process flow and production infrastructure that provide at least a 35% efficiency improvement. This includes quality improvements like understanding, characterizing, and simulating products and processes to manufacture and accept products based on scientific criteria. The benefits of this project include reduced process variability, cycle time, and waste of ongoing activities.



Mist Control for Agile Machining



PT3800 Continuity Tester

## FINAL

- **Readiness of Workforce:** Readiness of workforce assures that new technologies developed in NNR can be deployed and successfully used in WR production. This includes formal knowledge preservation of critical activities at start-up or shut-down to assure longevity of WR processes, workforce training and integration of the diversely skilled workforce into improvement efforts. Six sigma teams are utilized as a best practice in assuring workforce readiness. The benefits are reduced process variability, cycle time, and waste during restart from a dormant period or with transfer of responsibility among persons.

### **Pit Manufacturing**

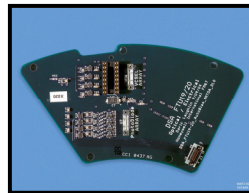
The NNSA's pit manufacturing capability is at LANL. KCP performs evaluations on the opportunities for Spin Form Fabrication to support manufacturing for the design laboratories in the non-nuclear shell production area. KCP also supports LLNL with dies for experiments. For longer term planning, the KCP plans to utilize KCRIMS capabilities to provide tools, gages, and other non-nuclear parts to support this LANL pit production capability and quantity production.

### **Enhanced Surveillance**

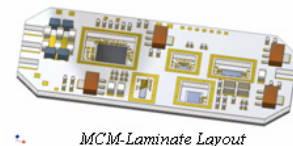
Enhanced Surveillance (ES) protects the health of the U.S. nuclear weapons stockpile through an integrated process that predicts, detects, and assesses aging effects that may impact performance, safety, or reliability. With diagnostic techniques for screening weapons systems, campaign efforts also predict material and component aging rates as a basis for annual certification, refurbishment scope and timing, and nuclear weapon complex planning. This critical effort involves partnerships between the KCP, the design laboratories, and other production agencies.

The Enhanced Surveillance work is divided into four Major Technical Elements (MTEs):

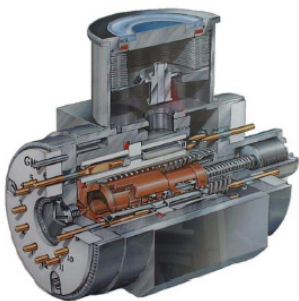
- **Systems:** Efforts to develop embedded sensors for future systems and LEP designs are being designed in conjunction with LLNL, LANL and SNL. The Integrated Telemetry Transmitter (ITT) and Radio Frequency Integrated Circuit (RFIC) development, in conjunction with SNL, is working to finalize a system of data sensors that will fit within the spaces between production parts to maximize opportunities for built in options. The Detonator Sensing Assembly (DSA) effort partners with LLNL to develop new diagnostics supporting the W87 JTA-4.



**DSA**  
Detonator Sensing Assembly  
(Optical Electronics)



*MCM-Laminate Layout*



Environmental Sensing Device (ESD)

- **Non-nuclear Components:** Considerable focus is being dedicated to Component and Material Evaluation (CME) in support of SNL non-nuclear components. These evaluations consist of component and material aging evaluations across multiple components across multiple weapon systems to assess potential age-related defects. The Component MTE is a wide-ranging partnership with Sandia National Laboratories to look at the aging of components in the stockpile; the data are the basis of re-use, refurbishment, and

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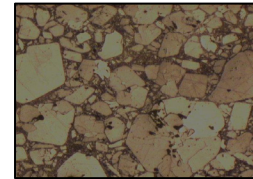
new-manufacture LEP decisions. A second major area is evaluating environmental sensing devices for age-related issues supporting SNL.

- Non-nuclear Materials: Polymer aging tasks characterize polymers, used in weapons, as they age and as they are exposed to different environments. This process generates data critical to LEP decision making. This work supports LANL, LLNL, and SNL.



Sample Temperature Controller

- High Explosive: These efforts require micro-scale optical surface analyses of high explosive components and the development of a fiber optic pin dome for hydro-dynamic test capabilities.



Sample Acquired Image

Enhanced surveillance will continue to provide technologies to nondestructively diagnose the health of the stockpile in the next ten years. Primary focuses will be on Component and Material Evaluations (CMEs) and embedded evaluations in support of future systems and LEPs.



### 3.1.3 Readiness in Technical Base and Facilities (RTBF)

The RTBF sustains the foundation required to perform fundamental services to external customers. It has two interlocking missions – to serve internal needs and to diminish performance risks to the other missions. To that end, this program’s activities refine, clarify, and articulate how RTBF relates to other functions to mitigate interference while controlling costs.

Under the RTBF umbrella are Facilities Management and Support; Real Property Maintenance; Scientific/Process Equipment and Capabilities (SPEC); Utilities and General Services; Excess Facilities Management and Disposition; Capital Equipment; General Plant Projects (GPP); Expense Funded Projects; Other Project Costs (OPC) for line item projects; Environment, Safety, Health and Quality; and Production Process Readiness. In 2003, Containers and the NNSA Portal Project were added to RTBF. These items contribute to the FYNSP funding targets (just like Production Process Readiness) but will not be part of the RTBF Operation of Facilities. There are currently no Line Items and therefore no OPC or GPP due to the Kansas City Responsive Infrastructure, Manufacturing and Sourcing (KCRIMS) project.

In FY 2007, the Kansas City Plant (KCP) adopted the national RTBF WBS. The effect of this is to split Maintenance into Real Property Maintenance and SPEC as well as consolidating Environmental with Health and Safety into one (Environment, Safety, Health, and Quality). In addition, Excess Facilities and Disposition was added. The KCRIMS Relocation Project and New Facility Lease are now broken out separately from Facilities Management and Support. Proposed Institutional Site Support (ISS) and Maintenance & Surveillance (M & S) are now out-year additions to RTBF to support the future disposition of NNSA property in the Bannister Federal Complex (BFC).

In anticipation of a new facility acquisition, planned capital improvement and deferred maintenance reduction projects in the existing plant have been significantly curtailed. While this action reduced RTBF spending in FY06-08, the planned RTBF budget will begin a short period of higher needs for planning, relocating, and provisioning the new facility followed by significantly lower costs when the transition is complete in FY 2013.

Overall, the buildings, structures, and systems at the KCP are performing as intended. KCP maintains the facilities to support short-term operation in support of the NNSA mission as we transition to the new KCRIMS facility. The RTBF program funds ongoing maintenance of the plant as well as the transition activities. In the past, Facilities Infrastructure Recapitalization Program (FIRP) funded the replacement and recapitalization of aging systems, thus reducing the deferred maintenance backlog. However, no new-start infrastructure Line Items or FIRP projects are anticipated in the future, given the philosophy of the “Pause Plan” (summarized below). As a result, the KCP will have to use its limited RTBF funding to address any infrastructural deficiencies previously covered by those funding sources through 2012 and the potential savings from efficiencies would be applied to offset the KCRIMS project costs. KCRIMS will alleviate \$230M of Deferred Maintenance (DM) in 2013.

The KCP, in concurrence with the Kansas City Site Office (KCSO), developed a “Pause Plan” whereby facility projects originally to be funded as Line Item projects, General Plan Projects (GPP), and FIRP projects are being “paused” (that is deferred or postponed indefinitely) rather than “cancelled”. This means that a majority of the facility projects have been stopped, with a final determination being made on rescoping, rescheduling, or canceling these projects once

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GSA signs a lease for the new facility. As a result of this posture, the KCP will be relying primarily on RTBF funding to sustain operations; as no projects requiring GPP or FIRP funding are planned. Facilities and infrastructure projects will focus on sustaining Powerhouse central systems, roofing systems, environmental remediation systems, structural/seismic systems and safety/code compliance systems with a managed equipment lifecycle approach balanced by LEP program completion requirements for the remaining plant equipment/systems. Projects will be developed to keep critical departments operational but will shift from proactive and long-term in nature to a more reactive short-term response driven by immediate production needs. ISS projects have been proposed to prepare the KCP facility for disposition.

Maintenance/Operations organization will continue to provide full support of LEP production requirements and facility stewardship, in the existing facility, to meet safety/code compliance and central plant reliability throughout the transition to a new facility. Other non-critical equipment/systems will be evaluated and Maintenance/Operations support levels will be adjusted to enable equipment life through LEP production at the existing facility. It is anticipated that preventive maintenance activities will be reduced and corrective maintenance activities will increase as operations are transitions to the new KCRIMS facility. During the 2013 timeframe, the Maintenance/Operations organization support will shift to a “cold shutdown” state in the existing facility and full support of production in the new facility.

### **3.1.4 Security Programs**

The KCP Security organization provides all aspects of security protection for classified and sensitive material and information, government property, and employees on a year-round, 24-hour, seven-day-a-week basis. The KCP processes document and control materials up to and including Top Secret Restricted Data (TSRD).

The highest classified level of information processed at the KO is SRD. Its security operation also provides facility support and training for Fort Chaffee, Arkansas, which supports the OST. In addition, KO supplies engineering and technical support for LANL.

The mission of the KCP security program is to:

- Protect NNSA and other partners’ unclassified and classified information and material from theft and unauthorized disclosure, destruction, or modification.
- Protect property against theft, sabotage, misuse, or hostile acts.
- Protect employees, subcontractors, and visitors.
- Integrate ethics and environment, safety, and health regulations into all security operations.

Integrated Security Management drives security requirements into all aspects of daily operations and provides education to associates on security roles and responsibilities.

### **3.1.5 NNSA Reimbursable Work**

The primary role of reimbursable work is to exercise the engineering and production infrastructure in order to maintain and enhance the manufacturing capabilities and readiness of the plant to support its assigned mission into the future. Additional benefits include: 1)

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offsetting a portion of the fixed overhead, 2) enhancing the ability to retain and attract a highly skilled workforce, and 3) supporting national security. This work is performed on a full cost recovery basis and is consistent with the KCP Technology Plan and NNSA Technology Roadmap.

In FY 2007, approximately 50% of the reimbursable dollars supported NNSA activities including paid work from the laboratories and plants, Department of Defense (in support of NNSA programs), Office of Secure Transportation, Office of Emergency Response, Defense Nuclear Nonproliferation, and in support of other NNSA objectives.

As KCP continues to grow its reimbursable work, it is pursuing potential opportunities in the WFO category, along with work to support the NNSA/DOE in areas of Emergency Response, Defense Nuclear Nonproliferation, Global Nuclear Energy Partnership, and DOE Security Operations. It is anticipated that the KCP will continue to generate no less than 25% of its reimbursable work from the NNSA/DOE.

### **3.1.6 Kirtland Operations (KO)**

Kirtland Operations provides a wide range of technical support and services to the NNSA, the national laboratories, other NNSA contractors, the Department of Defense (DoD), other government agencies, and non-DOE agencies that complement the NNSA missions. Services include engineering, technical support, information technology, training, field support, and small-scale production.

The majority of Kirtland Operations' work is in support of the Office of Secure Transportation (OST). The remainder is to customers that fall into the categories of National Laboratories, Emergency Response, Kansas City Plant, and Special Technologies. In FY 2011, Safeguards Transporter (SGT) refurbishment will transition to KO oversight into the ATTC. SGT refurbishment, currently being performed at the KCP, will be discontinued at the end of FY 2011 and new builds will be completed at the KCP as planned in the same year.

Kirtland Operations' programmatic activities located in Albuquerque will transition to NNSA's ATTC in FY 2011 with the exception of those remaining at the NC-135 Site to support NA-40 operations. Evolving NA-40 mission needs may lead to facilities and infrastructure modifications at the reduced site containing buildings 133, 134, 135, 136 and P1. Site services including facilities, infrastructure and ancillary maintenance, security, and information technology will be retained at the NC-135 Site for support. Together, both sites will provide adequate space for projected mission needs. The Craddock and Air Park leases will be terminated.

#### **OST Support**

OST is the primary source of Kirtland Operations business. Approximately 60% of the work performed by Kirtland Operations is in support of OST. Kirtland Operations' full complement of services supports practically every facet of OST operations.

Activities performed or developed at KO facilities supporting OST include operational and design engineering, fabrication and assembly, construction, test and evaluation, maintenance, technician training and certification, federal employee training development and operations, and

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logistical support. Work is also performed at OST headquarters; the Transportation Emergency Control Center (TECC); the Alternate Transportation Emergency Control Center (ATECC) sites; the Mobile Electronic Maintenance Facility (MEMF); the Training Logistics Command (TRALOC); the New Mexico Relay Station; and other locations, including the Communications Consolidated Depot, and various U.S. locations while deployed during field exercises and while conducting on-site training and certification of technicians.

### **National Laboratories Support**

Kirtland Operations services closely align with the needs of the National Laboratories. The laboratories include Sandia National Laboratories (SNL), Lawrence Livermore National Laboratory (LLNL), Los Alamos National Laboratory (LANL), and Battelle (Brookhaven, Oak Ridge, and Pacific Northwest). Traditionally, Kirtland Operations has provided SNL and LANL with technical support (engineers, information technology, and technicians) and small-scale production work. Kirtland Operations provides all the laboratories with technical support in various areas of their weapons, physical security and programmatic business. Kirtland Operations frequently supports the laboratories as residents in their facilities and works as an integrated project team with their staff. Support is also provided on-site with engineering projects and small scale production efforts. Kirtland Operations supports Dynamic Experimentation and Applied Physics, Process Engineering and Quality Assurance, Calibration and Production Controls, Electrical Engineering, Programming and Software Analysis, Drafting and Design, Computer Configuration and Repair, Electronic Prototyping and Testing, Security System Evaluation, and Engineering Analysis and Testing.

### **Emergency Response Support**

Organizations in this support category consist of the NNSA Office of Emergency Management (NA-40), NNSA Office of Defense Nuclear Security (NA-70), the Defense Threat Reduction Agency (DTRA), the Federal Bureau of Investigation (FBI), and the Joint Special Operations Command (JSOC). Kirtland Operations' support includes engineering, procurement, technical and security specialists, small-scale production, logistics support, field support, and technical documentation.

### **Kansas City Plant Support**

This work is in support of Kansas City Plant funded projects. It may be managed and controlled by Kirtland Operations or it may utilize Kirtland Operations resources to support KCP reimbursable work. Examples of work that is managed and controlled by Kirtland Operations include, test equipment design, PDRD, ADAPT, Enhanced Surveillance Campaigns (ESC), Knowledge Preservation, and detonator cable fabrication. An example of work that uses Kirtland Operations resources but is managed by the KCP is the OST Safeguards Transporter (SGT) generator and storage compartment fabrication effort.

### **Special Technologies**

Special Technologies is the work not under any of the previous categories. It includes work for other DOE/NNSA organizations (e.g., Defense Nuclear Nonproliferation, Office of Health, Safety and Security), other government agencies (e.g., Department of Homeland Security, Department of Transportation, United States Department of Agriculture, Department of Defense,

Canadian Nuclear Safety Commission), state and local governments (e.g., Kansas Department of Agriculture, Missouri Department of Transportation), and private industry (typically in the form of a Cooperative Research and Development Agreement – CRADA).

### 3.1.7 KCP Transformation – KCRIMS

In accordance with NNSA’s Complex Transformation Strategy 2, Honeywell Federal Manufacturing and Technologies (FM&T) is transforming Kansas City Plant operations by significantly reducing annual operating costs and improving responsiveness to the National Nuclear Security Administration (NNSA) supply of non-nuclear components. The internal name for this program is “Kansas City Responsive Infrastructure Manufacturing and Sourcing” or KCRIMS. The proposed transformation utilizes the following three interrelated thrust areas for change:

- Strategic Sourcing and Sizing
- Business Excellence Facilitated by Revised Operating Requirements
- New Modern Facility Sized for the Future NNSA Mission by 2012

These strategies are exemplified in Figure 9 by showing how the old infrastructure, consisting of a large maintenance of capability base joined with a significant commercial supply base, can transform with both KCRIMS and NWC-wide strategies to a much smaller and responsive infrastructure coupled with a slightly larger commercial supply base. Execution of these plans is expected to reduce the NNSA operational footprint of the non-nuclear component production mission and reduce operational costs by approximately \$100M annually.

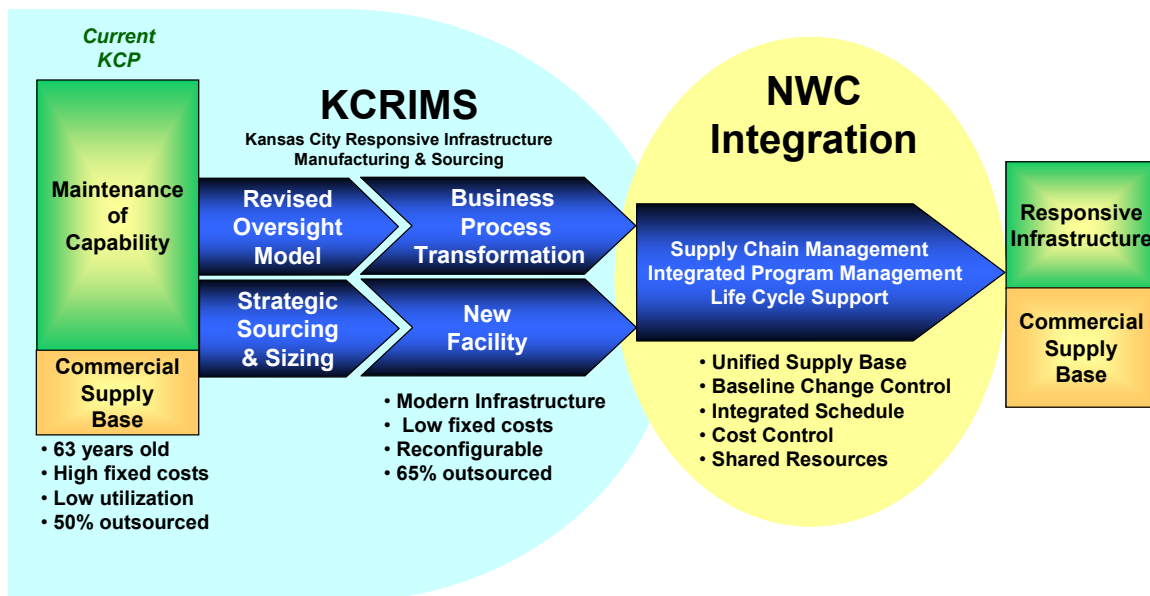


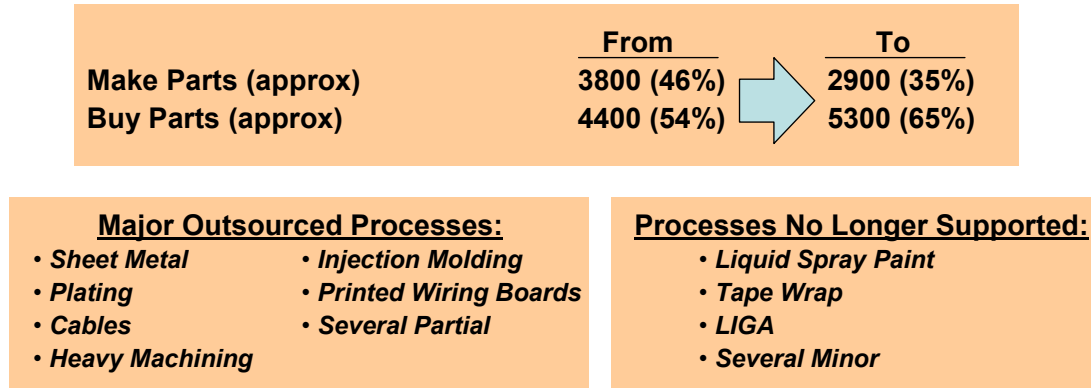
Figure 9 – KCP Transformation Strategy

#### Strategic Sourcing and Sizing

The current KCP facility comprises approximately 3.0 million gross square feet including 2.8 million square feet of operational space in approximately 40 manufacturing departments;

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numerous production support areas such as stores, test equipment, metrology, and laboratories; and large administrative support areas such as offices and maintenance. To enable a smaller facility and drive the operational model to a lower fixed cost, it is necessary to transform the current state into a new model. In the new model, capabilities that are commercially available will be outsourced and remaining in-house capabilities will be properly sized for the anticipated production rates of future weapon programs.



**Figure 10 – Strategic Sourcing and Sizing**

In many cases, existing departments with redundant capabilities will be consolidated into one common process area. Whenever practical, capabilities across the NWC will be assessed and utilized to reduce the expense of redundant and underutilized capabilities within the complex. A summary of the current results of the strategic sourcing and sizing element is shown in Figure 10.

**Business Process Transformation**

Business process transformation will be less visible and draw less attention than the physical transformation of the plant, but it is no less important in the overall success of the KCRIMS project. Honeywell FM&T believes that considerable cost savings can be realized from more closely aligning non-nuclear production with commercial industrial practices rather than those driven by DOE orders formulated for the operation of facilities that handle nuclear material.

One of the key supporting documents to the transformation plan was a new oversight model that reengineered the relationship between the Kansas City Site Office and the KCP contractor. The new oversight model is critical to achieving all of the goals of KCRIMS. In particular, cost savings assumptions are based on a more commercial-like operation that cannot be achieved without a significantly different oversight approach and more reasonable reactions to that oversight. The new oversight model has the following key components:

- A set of operating requirements that is flexible, yet sufficient to assure that contract and legal obligations are met.
- An audit system consisting of corporate, internal and self, third-party, and field assessments in key mission areas.
- A Management Assurance System developed by the contractor and its parent that provides visibility to the customer on how the leadership assesses the health of the enterprise.

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- Contract changes that define all deliverables, and formalize a baseline change control management process.

The new oversight model was approved by DOE/NNSA headquarters in February 2007.

To drive a true change in business processes, cost targets were developed for each operating division. The process for setting these targets involved gathering FY 2006 baseline data, benchmarking other comparable Honeywell sites, contracting with a consultant to review divisional functions and perform additional benchmarking, and presentations and negotiations with the divisional leadership. Two divisions, Kirtland Operations, and Applied Technologies (T00) did not participate in this exercise because they are out of the scope of the KCRIMS transformation. The cost targets were then adjusted through an iterative process before being finalized. The targets for expected performance by FY 2013 (in FY 2006 comparable dollars) are shown in Figure 11.

Division	FY06 Labor & Expense Base	Initial Targets 10/23/06	Final Targets 9/18/07	Percent Reduction	Percent of FY06 Operation	Percent of FY13 Operations
010 General Management	5,578,190	4,500,000	4,500,000	19.3%	1.6%	1.8%
100 Facilities & Maintenance	62,752,147	25,000,000	25,000,000	60.2%	18.0%	10.2%
200 Program Management & Business Development	11,358,609	8,000,000	7,880,000	30.6%	3.3%	3.2%
400 Quality & Business Excellence	16,454,121	10,800,000	11,488,000	30.2%	4.7%	4.7%
500 Human Resources	4,073,694	2,000,000	3,500,000	14.1%	1.2%	1.4%
600 Integrated Supply Chain	64,841,601	54,000,000	54,227,000	16.4%	18.6%	22.2%
700 Finance	5,903,850	4,000,000	3,773,000	36.1%	1.7%	1.5%
800 Engineering	83,415,747	62,100,000	62,100,000	25.6%	23.9%	25.4%
A00 Information Systems	29,300,463	18,000,000	19,640,000	33.0%	8.4%	8.0%
K00 Kirtland Operations	31,151,382	31,151,382	31,151,382	0.0%	8.9%	12.7%
S00 Environmental Safety & Health	6,636,981	1,700,000	2,000,000	69.9%	1.9%	0.8%
T00 Applied Technologies	13,322,793	13,322,793	13,322,793	0.0%	3.8%	5.5%
X00 Security	14,041,000	9,000,000	5,838,000	58.4%	4.0%	2.4%
<b>Total Without K00 and T00</b>	<b>304,356,403</b>	<b>199,100,000</b>	<b>199,946,000</b>	<b>34.3%</b>		
<b>Grand Total</b>	<b>348,830,578</b>	<b>243,574,175</b>	<b>244,420,175</b>	<b>29.9%</b>	<b>100.0%</b>	<b>100.0%</b>

**Figure 11 – Transformation Divisional Cost Targets**

Each division developed a functional transformation plan to reach the stated targets by FY 2013. These plans included the following elements.

- Executive Summary
- Introduction and Background
- Current Functions and Services
- Business Process Transformation – Future State
- Critical Success Factors and Assumptions
- Budget and Resource Profile by Year
- Transformation Schedule
- Transformation Metrics
- Transformation Risk and Opportunity Assessment
- Spreadsheet of Current and Future Functions and Costs

More detail on the divisional functional transformation plans is included in the Non-nuclear Production Transformation Final Business Case.

## **New Modern Facility**

Acquisition of a new, modern, flexible manufacturing facility is the visible cornerstone of the KCRIMS transformation program. While the current facility has served the mission well for the last six decades, the costs to maintain and reconfigure this facility in a responsive manner have become excessive relative to the costs of the primary production mission.

The move to a new, smaller, leased facility is expected to result in significant savings in maintenance and security as well as other support areas and was a significant factor when developing the divisional cost targets.

CD-0 and CD-1 approvals have been received and the prospectus for the new facility has been approved by the Office of Management and Budget (OMB) and both houses of Congress. The selected alternative is the construction of a new facility in the Kansas City Metro area utilizing a GSA Lease process. Execution of this alternative meets the transformation vision, provides a new state of the art facility, has the lowest annual operating costs, represents a viable funding alternative, and has lower execution risk than other alternatives.

In summary, implementation of these responsive transformation strategies has a major impact on the TYSP, including overall operational, RTBF, FIRP, and construction Line Item budgets. The assumption that KCRIMS transformation will be implemented is pervasive throughout this document and the FY 2010-2014 KCP budget submittal.

### **3.2 Non-NNSA Missions, Programs and Workload**

There are a number of other non-NNSA programs that are not dependent on NNSA to fund incremental needs. While facilities infrastructure capabilities are vital to perform the work for other than NNSA customers, the non-NNSA customers directly fund any additive costs.

The Kansas City Plant has a growth strategy around supporting the DoD's Diminishing Manufacturing Sources & Material Shortages (DMSMS) and urgent technology sustainment needs to support the warfighter. The growth strategy exercises the Kansas City Plant's technical and manufacturing skill in high voltage electronics and benefits the NNSA by offsetting a portion of the site's overhead cost. As a part of this effort, KCP will be manufacturing high voltage power supplies (HVPS) for the B-2 Spirit Bomber. Facility modifications will be performed in order to accommodate the equipment necessary for this product line. Projected requirements are for four (4) or more HVPS out to the year 2010 or until a new digital technology can be developed for the B-2. The exact delivery requirements are dependant on future failure rates with the existing weapons platform.

#### **3.2.1 DoD Programs**

A growing workload segment is the support of DoD equipment maintenance and spare parts inventory management. During FY 2009 – FY 2014, these DoD activities are planned to support DoD field operations:

- Trainer Refurbishment program: B83-1 Type 3C, B61-7 Type 3E, B61-11 Type 3C, B61-11 Type 3E, W78-0 Type 3A, and W87-0 Type 3C
- Test Gear (T-Gear) Recertification: T562, T566, T569, T568, and T558A



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- Handling Gear (H-Gear) Reprocessing: H1388, H1473, H1224A/H1223B, and H1616 Training Containers
- Base and Military spare parts inventory supporting the current weapons stockpile
- Various production, repair and reprocessing efforts as directed by DoD

Additionally, for the Military Spares program as of FY 2008, the DoD is reimbursing the NNSA for 2,500 square feet of inventory space to house equipment and material for field support. The KCP is identifying and proposing to the DoD alternative field support strategies to drive down inventory requirements. This 2,500 square feet is part of the GSA assigned space in the Main Manufacturing Building currently leased by the NNSA (KCP Attachment E-3, line 1).

### **3.2.2 KCRIMS WFO Strategy**

The KCP has had a successful WFO program for several years extending its capabilities and capacities to various government agencies outside of the Department of Energy. It is clear from the success of this program that there is a critical need for secure manufacturing and engineering services to support National Security and the Global War on Terror (GWOT).

The primary role of WFO is to exercise the engineering and production infrastructure in order to maintain and enhance the manufacturing capabilities and readiness of the plant to support its assigned mission. Additional benefits include: 1) offsetting a portion of the fixed overhead, 2) enhancing the ability to retain and attract a highly skilled workforce, and 3) supporting national security. This work is performed on a full cost recovery basis. Non-weapon related WFO accounted for approximately 50% of the reimbursable work in FY 2007. This type of WFO includes work for other government agencies and commercial entities.

Weapons related WFO will continue to be supported at the KCP under KCRIMS. However, a new business model is being developed for non-weapons related WFO. The KCP is planning for the non-weapon related WFO to be supported by our current Applied Technologies organization. The Applied Technologies organization is planned to become a semi-autonomous business that is fully supported from WFO funding. This new business is referred to as the National Secure Manufacturing Center (NSMC) and will focus on assisting other Federal Agencies in accomplishing goals that may otherwise be unattainable in support of National Security missions. The NSMC reduces (or eliminates) encumbrances of the nuclear weapon infrastructure, yet continues its symbiotic relationship with the KCP for complementary WFO, sharing of best commercial practices and supply of excess manufacturing and engineering capacity should the need arise.

### **3.2.3 Work for Others (WFO) Cost Recovery**

Reimbursable work at KCP is all other work that is not included in the Weapons Activities portion of the KCP laboratory table from the NNSA's budget documents. In FY 2007 approximately 50% of the reimbursable dollars supported NNSA activities including Office of Secure Transportation, paid work from the laboratories and plants, Emergency Operations, and other NNSA activities. WFO (customers outside of DOE/NNSA) generated approximately 50% of the reimbursable work. This includes work for other government agencies, Department of Defense, FBI and commercial entities.

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WFO work must be authorized by KCP management, approved by NNSA/KCSO, and where applicable NNSA/HQ before work can begin. The approval process requires assessment of the capabilities and capacities within the existing KCP infrastructure and any additional risk to NNSA. In addition, WFO projects are estimated and contracted in such a way that funding sponsors bear fully burdened project cost.

The KCP maintains a mature and comprehensive WFO business process. This gated process requires reviews and authorizations meeting the requirements contained in DOE O 481.1C, Work for Others (Non-Department Of Energy Funded Work), and DOE M 481.1-1A Reimbursable Work for Non-Federal Sponsors Process Manual, and adheres to the policy contained in DOE 2110.1A, Pricing of Departmental Materials and Services.

Work instructions for the WFO business process are maintained in the computer based KCP command media system, which is part of the ISO 9001 certified KCP Quality System.

The KCP WFO business process uses a five step strategy for the capture of WFO type work; pre-assess, assess, pursue, propose, and post-decision book. During the assessment phase, business opportunities proceed through a gated process which includes reviews for counterintelligence, security, compatibility with the Prime Contract, involvement with another federal organization, and a Broad Area Announcement (BAA). NNSA/KCSO is invited to the gate reviews. Compatibility with the Prime Contract requires that this work must be complimentary to DOE/NNSA missions, must not compete with private industry, must not interfere with assigned programs, must not be a future burden to DOE/NNSA, and must be full cost recovery.

During the propose phase, a WFO Agreement/Proposal package is prepared which includes a cost estimate that applies rates published by Accounting and updated annually to ensure projects are fully burdened using current rates. Of course, a customer can request exception to full cost recovery per DOE 2110.1A. Additional reviews are conducted during this phase including those for Environmental Safety and Health (ES&H), NEPA compliance, personal conflict of interest, intellectual property and export control. If the work would involve travel outside the continental United States (OCONUS), exception to full cost recovery, funding from a foreign source, construction greater than a GPP level of \$1.7 million, involves use of human or animal subjects, involves Space Nuclear, non-commercial power reactor or Radioisotope power sources, or involves Nuclear Nonproliferation detection technology, the project must seek HQ approval through NNSA/KCSO.

Both KCP operations management and the NNSA/KCSO WFO Coordinator must agree and certify that the proposed work is valid WFO compliant with DOE Orders. Once completed, the WFO proposal package is provided to the NNSA/KCSO WFO Coordinator for signature and authorization to proceed. Only after all authorizations (KCP management, NNSA/KCSO, and NNSA/HQ where applicable) is work begun for federal sponsored work or a contract may be offered to non-federal work sponsors.

Reimbursable work is performed on a full cost recovery basis and overhead recovery assumptions are incorporated into the KCP Defense Programs budget. This is reviewed annually and adjusted as needed. KCP recovered \$55 million in overhead on \$146 million of reimbursable work in FY 2007 (\$24 million of the \$55 million in recovery was from non-NNSA sources). The KCP pricing rate methodology applies a site support overhead rate to labor work to recover facilities, maintenance, and other infrastructure type activities from reimbursable

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work. For every dollar of reimbursable labor work, NNSA collects approximately \$1 in overhead, 23 cents of which is applicable to facility infrastructure type site support. In FY 2007, KCP reports that total reimbursable work recovered \$11 million (\$3.9 million from non-NNSA sources) in support of facility and infrastructure (RTBF) type activities. The \$11 million represents approximately 12% (\$3.9 million from non-NNSA WFO sources equates to 4%) of \$98 million in facilities, infrastructure, and ES&H activities.

WFO will continue to be part of the overall KCP business model because it helps cover the NNSA fixed infrastructure costs and share best commercial practices.

### **3.3 NNSA Non-Weapons Missions, Programs and Workload**

#### **3.3.1 Supply Chain Management Center (SCMC)**

NNSA tasked Honeywell with creating and leading the Supply Chain Management Center (SCMC) on August 7, 2006. The SCMC primary mission was to ensure improved acquisition efficiencies across the seven divergent NNSA contractor sites and to transform the sites' acquisition processes from tactical and reactive to a strategically driven, integrated function. The overarching goal, through collaboration across the contractor sites, was to reduce costs through enterprise-wide system integration, commodity strategy, and leverage of NNSA's \$3.3 billion annual contractor purchasing spend. The SCMC mission and its overarching supporting goal will be achieved through the implementation of technology and processes integrating the NNSA enterprise as follows:

- eSourcing – enabling the sites and SCMC commodity teams to conduct reverse auctions and electronic sealed bidding to drive cost savings and streamline the acquisition process;
- NNSA's eStore – a repository for NNSA-wide contract catalogs accessible to site users to populate web-based requisitions with items reflecting leveraged pricing and reducing purchasing cycle-time;
- NNSA's Spend Analysis – a proven application through which the SCMC commodity teams assess the \$3.3 billion annual contractor spend and identify common opportunities across sites for strategic sourcing contracts;
- The NNSA Portal – a proven application used as a gateway into shared applications across the sites, such as the Spend Analysis application, thereby precluding the purchase of redundant site systems; and
- Strategic Sourcing/Commodity Contracting – through collaboration among the SCMC commodity teams, the sites, and the Integrated Contractor Procurement Teams, strategic sourcing/commodity contracts are issued using a disciplined approach to leverage contractor requirements and spend in order to standardize purchasing practices enterprise-wide to yield reduced pricing, better delivery, increased quality and improved service.

Initial efforts have focused primarily on system integration and on acquisition efficiency for non-weapon cost elements of NNSA such as staffing, plant operational costs, equipment, fuel, and services. Future effort will be increasingly focused on also driving down production material spending where appropriate.

### **3.3.2 Roof Asset Management Program (RAMP)**

The Roof Asset Management Program (RAMP) is a Nuclear Weapons Complex-wide program to manage roofing repairs and replacements at multiple sites under one contract. Partners in this program include the Kansas City Plant, Pantex, Y-12, Los Alamos National Laboratory, Lawrence Livermore National Laboratory, and Nevada Test Site. The RAMP utilizes centralized planning techniques to effectively manage roofing assets across multiple sites and multiple structures. Prior to implementation of this program, sites had the responsibility of justifying roofing needs independently, with each site competing for the same limited funding. With this program, NNSA/HQ allocates limited funding to the highest priority roofing needs, regardless of which site owns the roof. The program manages over 16 million square feet and 4,700 separate roof areas among the six sites. The strength of the program is not only the replacement of critical roof areas, but the ability to make sound decisions to optimize and extend roof life across the complex.

The Kansas City Plant holds the contract with the roofing management contractor, Building Technology Associates, Inc. (BTA) in Detroit, Michigan. The Kansas City Plant provides not only contracting services but program management and project control services for this unique initiative. A team consisting of NNSA site office and contractor representatives from each of the six partners manages the program. The team works closely with BTA to award subcontracts at each of the partner sites and execute design/construction.

NNSA/HQ (NA-52) originally committed \$50 million to this program over the first 5 years and considers this approach a model for other activities within the NWC. Due to the success of the program, NNSA/HQ will continue to support the program through FY 2013. Since the program's inception in FY 2004, the following funding amounts have been received from NA-52:

FY 2004 – \$ 5.4 million

FY 2005 – \$15 million

FY 2006 – \$ 6 million

FY 2007 – \$15 million

FY 2008 – \$15 million

FY 2009 – FY 2013 – Anticipate a minimum of \$10 million per year

### **3.4 Facilities and Infrastructure Impacts in Support of Information Technology**

The Information Technology (IT) organization continues to play an increasingly important role at the KCP and is highly regarded within the NWC's IT community. A mixture of IT assets and facilities are required to enable and sustain KCP's business environment. As the KCP is transformed, enabling IT infrastructure, assets, and facilities must also be transformed.

The KCP IT is transitioning from a large number of home-grown applications to a smaller set of core off-the-shelf business systems. Per our guiding principles, KCP IT strives to minimize customization in order to maintain agility of the IT ecosystem. The usage of client-server and web-enabled service solutions for its major business functions enables deployment of major systems with minimal impact to the operating environment.

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A robust unclassified environment was designed and implemented throughout the KCP and a complementary classified environment is deployed and maturing.

IT facility and infrastructure design efforts are now focused on space, facility, utility, and other infrastructure needs for the targeted KCRIMS facility while maintaining acceptable service levels within the existing site. As IT prepares for the KCRIMS facility, emphasis will be on reduction of annual IT operating costs and improving responsiveness to the core mission. The KCP will lean its IT processes, applications, and infrastructure to provide the right capabilities more cost effectively in the future. There will also be an increased emphasis on partnering with Kirtland Operations to obtain maximum benefit of budget spent for hardware and application licensing.

To this end, an effort is underway to assess the business impact of IT systems and define needed service levels to align investments and solutions with business needs. The defined service levels and KCP transformation business decisions will drive significant IT changes. Other IT transformation efforts are targeted at simplifying and reducing the size and cost of application and infrastructure elements. Transformation efforts are driving business decisions related to facility and infrastructure for both the existing set of sites (Kansas City and Albuquerque) and the future KCRIMS site. Future investments must be strategically staged within the context of the existing and KCRIMS sites.

The KCP will continue to manage the technical refresh of IT infrastructure elements to enable transition into the new KCRIMS facility. Some elements requiring replication of capability will be contained within the KCRIMS budget. After completion of the KCRIMS effort, the KCP IT infrastructure technical refresh costs will be lowered to approximately \$3 million per year.

Today, a research (PDRD-funded) project is assessing the possibility of leveraging wireless network technologies. Technical decisions in these areas will directly impact facility needs at the new site. Existing plans will be augmented to account for discoveries made through current research efforts.

In support of NWC initiatives, the KCP has been awarded additional IT assignments. These include: NNSA portal development and hosting, classified application development, Enterprise Secure Network (ESN) leadership and procurement assignments, Supply Chain Management Center, and Office of Secure Transportation (OST) web application development and hosting. These functions will be provisioned within existing and future site and utility needs.

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## **4.0 Real Property Asset Management**

### **4.1 Site Description**

#### **4.1.1 General Site Description**

##### **Kansas City Plant (KCP)**

The KCP is situated on approximately 136.1 acres of the approximately 300-acre Bannister Federal Complex (BFC), located 12 miles south of downtown, within the city limits of Kansas City, Missouri. The plant shares the site with other federal agencies. The KCP resides on a very compact, highly developed site. Low hills nearly encircle the plant, which is situated in the Blue River Valley approximately 800 feet above sea level. A 500-year flood level protection system protects the Bannister Federal Complex.

The area is zoned for heavy industry with the surrounding area characterized by single and multiple family dwellings, commercial establishments, industrial districts and public use lands. Because of these restrictions, there are no long-range plans to change the boundaries of the site.

Two four-lane city streets adequately serve the site: Troost Avenue on the west and Bannister Road on the south. These city streets provide excellent access to nearby interstate highways and housing communities. The Kansas City metropolitan area has an excellent pool of high-tech labor.

The KCP operates two powerhouses on site. Utilities are delivered throughout the BFC to the General Services Administration (GSA) and their various tenants who share the main building and several other buildings on the site. Only electrical service is distributed to the GSA building at 2306 Bannister Road at the eastern side of the site.

The KCP portion of the Bannister Federal Complex consists of three primary buildings in generally good condition. The large Main Manufacturing Building, (building #1), constructed in 1943; the Manufacturing Support Building, (building #13), constructed in 1957; and Building 92, constructed in 1985.

The NNSA and the GSA share the 2.6 million square foot Main Manufacturing Building. Of that, the NNSA has control of, or permit to, approximately two million square feet of that space. There are approximately 1.1 million square feet of space within the additional buildings under NNSA control for an approximate total of 3.1 million square feet of space.

##### **Kirtland Operations (KO)**

KO is located on 18.2 fenced acres of Kirtland Air Force Base (KAFB), adjacent to the city of Albuquerque, New Mexico, where it has resided since 1964. Officially designated the NC-135 Site, the area consists of 36 structures and trailers totaling approximately 60,000 square feet. KO occupies the NC-135 Site under the current land use permit, number O-KI-98-0013, granted to the NNSA by the Department of the Air Force for a term of five years beginning October 1, 1998, and ending September 30, 2003. An amendment to the permit extends the term an additional five years ending September 30, 2008. After KO consolidation into the new ATTC is

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complete, the Air Force has committed to grant a new permit for the NNSA to continue occupancy of a reduced area containing buildings 133, 134, 135, 136 and P1 at the NC-135 Site in support of NA-40 operations. KO also leases approximately 38,000 square feet in the Craddock facility and 10,000 square feet in the Air Park facility, both near the air base, plus an additional 2,800 square feet in Los Alamos, New Mexico. There are additional locations where KO provides programmatic support but whose facilities are not managed by KO. These locations include the Office of Secure Transportation's (OST) Mobile Electronic Maintenance Facility (MEMF) located in Albuquerque, the OST's Training Logistics Command at Fort Chaffee, Arkansas, and the OST's New Mexico Relay Station. The current employment for KO is approximately 270 people.

### **4.1.2 Kansas City Plant (KCP) Utilities**

The KCP operates two powerhouses on site. The West Powerhouse (WPH) produces steam, compressed air and chilled water for environmental and process control in support of the plant mission. The East Powerhouse (EPH) produces chilled water. These utilities are distributed throughout the Bannister Federal Complex to the various tenants with the exception of the GSA building at 2306 Bannister Road. In addition to providing heating and cooling capabilities, utility services for the Bannister Federal Complex are operated and managed by the KCP.

The KCP has two primary energy needs: electricity and boiler fuel (natural gas and fuel oil). The Kansas City Power and Light Company (KCP&L) provides electricity. Natural gas is the primary fuel and is purchased through a DoD nationwide contract. It is then delivered to the KCP through local pipelines. Fuel oil, drawn from on-site storage tanks is used as a backup boiler fuel for periods when natural gas is not available. Various commercial suppliers provide fuel oil when needed and on a competitive bid basis. Water and sanitary sewer service are supplied by the city of Kansas City, Missouri.

### **Utility Management**

KCP operations will be relocated to new facilities by the end of FY 2012 as currently planned under KCP transformation. With the planned relocation, all facilities and infrastructure related Line Item and General Plant Projects have been deferred or postponed indefinitely. Future utility sustainment projects, as stated in each utility service below, have been identified in the Utility Infrastructure Forecast. These projects will not be executed during KCP transformation unless required to support a critical mission need. Increased risk of failure to maintain utility service or environmental conditions is incurred with continued operation of older equipment that has been identified for replacement. The KCP infrastructure sustainment management process has been modified appropriately to minimize this risk and provide for management of KCP assets during the transformation period.

Utility systems at the KCP include purchased utilities (electricity, natural gas, process gases and water), as well as support systems and equipment for production requirements that are managed and maintained. The KCP manages 23 utility systems and the energy management plan. These are described in detail in the KCP Utility Management Plan. All systems have adequate capacity to serve the current plant demands and utility distribution systems are modified to meet new project requirements as needed.



## **Electrical Power**

The KCP purchases electricity from the Kansas City Power and Light Company (KCP&L) to power production machinery, water chillers, pumps, compressors, fans, lights and general office equipment. Power is supplied to the Bannister Federal Complex by two 161 kilovolt (KV) overhead transmission lines from the KCP&L Southtown and Tomahawk substations. Two KCP&L owned on-site transformers step the voltage down to 13.8 KV that is delivered to two main busses for distribution at the main switchgear. The main switchgear distributes this power to multiple substations serving the GSA buildings and the NNSA controlled areas. KCP&L electricity is reliable, high quality, and adequate to serve the plant loads. High overall system reliability is maintained through system upgrades, maintenance, redundancy and installation of reserve capacity.

The main switchgear exceeded its 30-year life expectancy in 1999. In addition, several substations have also exceeded their 30-year life expectancy. These replacement needs have been identified in the Utility Infrastructure Forecast. Other individual pieces of equipment that increase the efficiency of the electrical system and various pieces that have reached the end of their useful life have also been identified for replacement. These include 20+-year old substation breaker sensors for which manufacturer's parts are no longer available and power factor capacitors that have a high failure rate due to increased harmonic loads.

## **Central Steam System**

Steam is generated in the WPH with four 80,000 pounds per hour dual natural gas and fuel oil boilers and the associated boiler feed pumps, deaerator, water treatment equipment and controls. The steam production system was replaced by the Replace Boilers and Controls Line Item. Steam condensate is collected in the plant in multiple steam-ejector type condensate-return units that return it to the WPH where it is mixed with makeup water and fed back to the boilers. The steam system is currently very reliable and will continue being reliable due to the recent installation of the new boilers and related equipment. The system has sufficient capacity and redundancy to provide continuous service during extreme weather conditions and high plant demand.

## **Central Chilled Water Facilities**

Chilled water is produced in both the WPH and the EPH and supplied to KCP facilities, through a common distribution system. Approximately 10,500 tons of water chilling capacity is installed in the WPH and 7,500 tons of capacity is installed in the EPH. Chilled water is used for temperature and humidity control for personnel comfort and production requirements, and for process cooling applications. The system is reliable and has sufficient capacity and redundancy to provide continuous service during extreme weather conditions and high plant loads.

A series of FIRP projects began in FY 2002 and replaced the last 14 of 20 water chillers with ten new, high efficiency units that use an environmentally friendly refrigerant, thus eliminating the use of CFC refrigerants. Chillers were purchased on a life-cycle cost basis and feature variable speed drives. The distribution and chiller loop pumps are equipped with variable speed drives to pump only the water needed to satisfy the plant loads.

## **Water Supply System**

Domestic water is purchased from the city of Kansas City, Missouri Water Services Department. Three independent mains feed the KCP on the south, northwest and northeast sides of the complex providing redundancy. Each feed is capable of meeting the KCP plant demand individually.

Domestic water is used as make-up for the steam, chilled water, condenser water, and fire protection systems and for sanitary applications (toilets, sinks, eyewashes, showers, drinking fountains and cafeteria). Potable uses are protected from industrial uses by an isolation cross-connection control program. The internal distribution system is in generally good condition and is adequate to serve the plant loads. However, some piping and valves are from the original building (1943) and suffer from calcium buildup. These buildups restrict flow and prevent valves from seating and leak when closed, hampering isolation for localized repairs.

## **Wastewater Disposal System**

Stormwater, sanitary wastewater, and industrial wastewaters are discharged from KCP operations. Sections 4.2.6 provides additional information regarding wastewater permitting. Process wastewater is not discharged to the storm sewer system. Only air conditioning condensate, periodic fire protection system test flows, and uncontaminated rain event run-off is discharged to the storm sewer system. Portions of two of the four permitted storm sewer systems have been lined to address infiltration of contaminated groundwater and sediment (see also Section 4.2.6). As conditions warrant, additional corrective actions may be required to address areas of contaminant infiltration into the storm sewer systems.

Sanitary and treated industrial wastewaters are discharged to the Kansas City, Missouri sanitary sewer system under a permit issued by the city. Industrial wastewater is collected through five separate systems (dilute acid, dilute caustic, dilute chrome, dilute cyanide and industrial waste). The majority of the dilute industrial wastewater is processed through a reverse osmosis treatment system and recycled for use as makeup water for cooling tower operations. Dilute cyanide, chrome, acid, caustic and the remaining industrial wastewaters are routed to the Industrial Wastewater Pretreatment Facility (IWPF). Concentrated plating baths and cleaning solutions are delivered to the IWPF in carboys for treatment. The dilute wastewater collection systems are in generally good condition. The IWPF and Reverse Osmosis wastewater treatment systems are in good to excellent condition. Four large dilute wastewater collection tanks at the IWPF are in need of routine inspection to determine the scope of maintenance activities to address interior / exterior coating condition.

The sanitary sewer system at the KCP consists of collection sumps and related piping. These systems are in generally good condition. The main sanitary sewer line carrying wastewater from the BFC should be inspected to assess its condition and determine the scope of any repairs. This line is dedicated to the BFC and travels approximately one mile before intersecting another city sewer main. Ownership of this line is unclear and DOE and GSA are working to determine whether ownership and maintenance is a city or BFC issue.

## **Natural Gas**

The Department of Defense, Defense Energy Supply Center provides natural gas to the KCP under a pooled nationwide contract. Natural gas is the primary combustion fuel for the steam boilers that provide heat to the Bannister Federal Complex (except the GSA building at 2306 Bannister Road ). The cafeteria, laboratories and a mold heating boiler system also use small amounts of natural gas. Pipeline capacities are sufficient to meet the plant demand during extreme weather conditions and high plant demand.

## **Fuel Oil**

The KCP uses #2 fuel oil as a backup boiler fuel when natural gas is in short supply. Fuel oil is purchased from commercial suppliers by competitive bid and is stored in two 250,000 gallon storage tanks adjacent to the WPH. These tanks were inspected and repaired in FY 2006. Two out-of-service #6 fuel oil tanks are no longer used and are candidates for demolition.

## **Air-Handling Systems**

The air-handling systems provide the cooling, heating, dehumidification, humidification, filtration and pressure control needed to meet critical production area temperature and humidity requirements and for personnel comfort. They supply office, production, and cleanroom areas in the plant. Most units are in adequate condition for the area served and are maintained to assure that area requirements are met.

Over 500 individual air-handling systems supply the NNSA portion of the Bannister Federal Complex. Age, deterioration, and changing area requirements drive the need for replacements. Systems range in age from new to over 45 years old. The average unit age is approximately 20 years old, with approximately one-third of these units already exceeding their 25-year life expectancy. FIRP projects replaced approximately 30 inadequate air-handling units. Additional AHU replacement projects are identified in the Utility Infrastructure Forecast.

## **Utilities Monitoring and Control System (UMCS)**

The building monitoring and controls system, including the application of Direct Digital Controls (DDC) to most of the air handling systems, provides state-of-the-art control of temperature, humidity and pressure to support the needs of process areas and personnel comfort. Flexible programming capabilities of the system allow for adjustment to parameters and setpoints depending on outside and inside conditions to satisfy the area's environmental requirements with minimum energy usage. The programming also allows scheduled start and stop of air-handling units; the use of a freeze protection system for units and piping exposed to the elements; utility equipment operation; and monitoring of critical alarms for utility equipment and material storage cold boxes. Approximately 95% of the KCP's air-handling systems have current generation DDC controllers serving them. Nearly all of these systems communicate using the fiber optic based facilities network. The UMCS is monitored and controlled from control rooms in the EPH and WPH. These control rooms are staffed at all times.

## **Plant Safety**

The Fire Alarm System and Emergency Notification System (ENS) are critical to plant safety. Both the Fire Alarm System and ENS are proprietary, protective-signaling systems. Each is controlled from or reports alarms to the KCP Patrol Headquarters which is staffed at all times. Both systems are in relatively good condition and have additional capacity for any necessary expansion.

## **Fire Suppression**

The fire suppression system is comprised of two water supplies providing water through an underground and interior fire main grid to 144 individual sprinkler systems. The west side water supply is a dual-use reservoir with the cooling tower basin. It provides water to two electric-driven pumps. The east side supply is an on-grade tank supplying water to two diesel-driven pumps. Both sides supply water to the 10-inch underground fire main grid with 10-inch interior mains. These fire mains feed the non-NNSA part of the Bannister Federal Complex in addition to the 144 individual KCP risers. The overall condition of the system is good and provides good reliability with redundancy. A few components are rated as fair. Expense funded projects have addressed firewall deficiencies and corrected hundreds of sprinkler deficiencies that affected life safety.

## **Other Utility Systems and Services**

Compressed air is produced by the four compressors, dryers, and associated equipment in the WPH. The compressed air system is a vital utility that supplies clean, dry compressed air to the Bannister Federal Complex (except the GSA building at 2306 Bannister Road) for production uses and control of temperature and humidity control devices. The air compressors are of various sizes to allow matching to the plant loads. The system is very reliable and additional capacity is available for new loads.

Other managed utility systems include liquid and gaseous nitrogen, argon, carbon dioxide, cranes, elevators, exhaust, hydrotherm (mold heating and cooling), reverse osmosis water and building structural loading. Each system is generally adequate and capable of satisfying the plant demand.

## **Energy Management**

The KCP has an Energy Management Plan (EMP) that complies with federal regulations and executive orders regarding energy conservation. It supports the NNSA requirement for an overall federal Energy Management Plan for conserving fuel and energy in all its operations as required by Executive Order 12902 of March 8, 1994, Executive Order 13423 of January 26, 2007, Energy Policy Act 2005 (EPAct 2005), and NNSA policies for energy efficiency, renewable energy and water conservation.

In accordance with Executive Order 13423, the energy reduction goal is 3% annually through the end of FY 2015 or a 30% reduction by the end of FY 2015 relative to the baseline energy usage in FY 2003. The EPAct 2005 energy reduction goal is to reduce energy usage 2% annually from FY 2006 to FY 2015 compared to the FY 2003 baseline. The KCP is well ahead of Executive Order 13423 and EPAct 2005 energy reduction goals. The KCP has reduced its energy

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consumption per square foot by 19.7%. When factoring in the Renewable Energy Credits purchased by the KCP, the energy reduction per square foot is 23.5%.

Figure 12 shows the KCP's consumption of electricity and natural gas and fuel oil as well as the total consumption of energy in number of BTUs per square foot floor space per year. The percentage reduction shown is the commodity reduction based on the FY 2003 baseline.

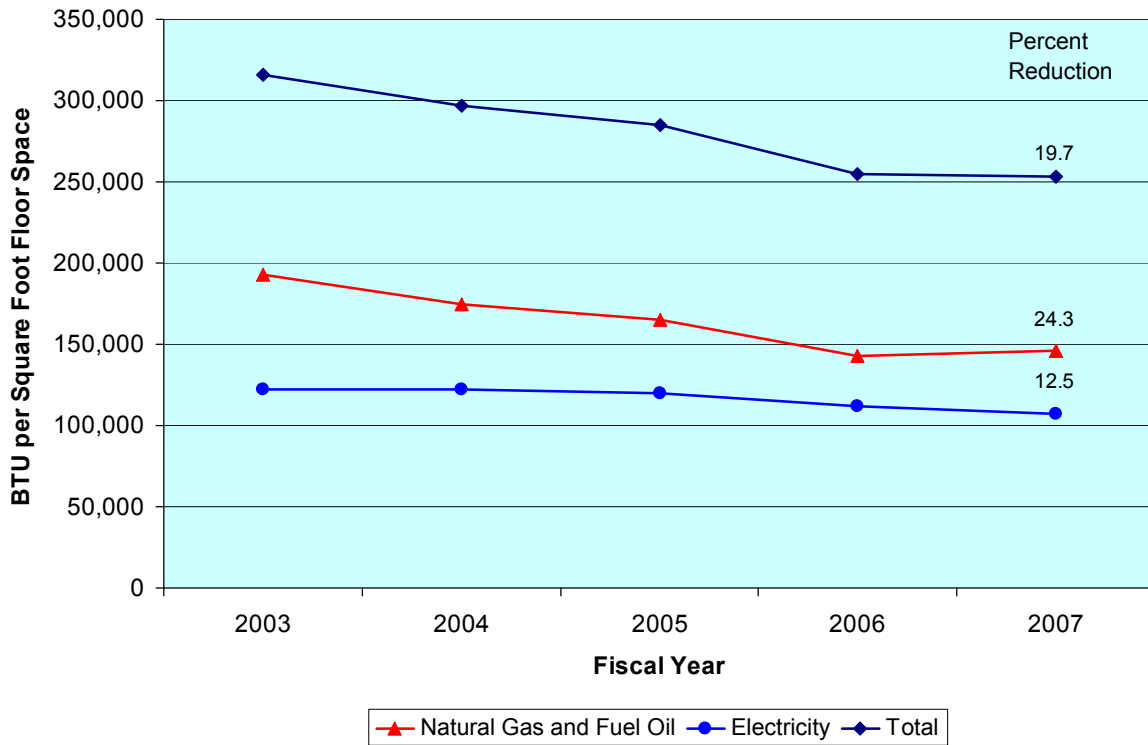


Figure 12 – Energy Consumption

The KCP established a water management plan in September 2003 with the assistance of the Federal Energy Management Program (FEMP). Four best management practices (BMP) from the water management plan have been implemented. The four BMPs implemented are toilets and urinals, faucets and showerheads, boiler/steam system, and cooling tower management. Since this plan has been in effect, the KCP has reduced water consumption by 46% compared to FY 2002. However, beginning in FY 2008, Executive Order 13423 water reduction goal is 2% annually through the end of FY 2015 or a 16% reduction by the end of FY 2015. This new water reduction goal will be a challenge to the KCP due to the significant water reductions made prior to FY 2008.

The KCP will continue applying the EMP to conserve energy until relocation to the new KCRIMS facility is complete and follow-on equipment removal and building preparation for sale is complete in FY 2013. Because of the move, the KCP will not develop or implement a plan to ensure 15 percent of existing facilities are in compliance with the guiding principles of Executive Order 13423. However, energy conservation activities at the existing KCP meet the guiding principles regarding energy consumption reductions. In addition, the new KCRIMS facility will be LEED *Gold* Standard certified (see Attachment C).

### 4.1.3 Site Maps

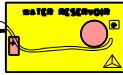
Figures 13 and 14, on the following pages, show the current KCP land utilization and facility status, respectively. The KO site layout follows in Figure 15.

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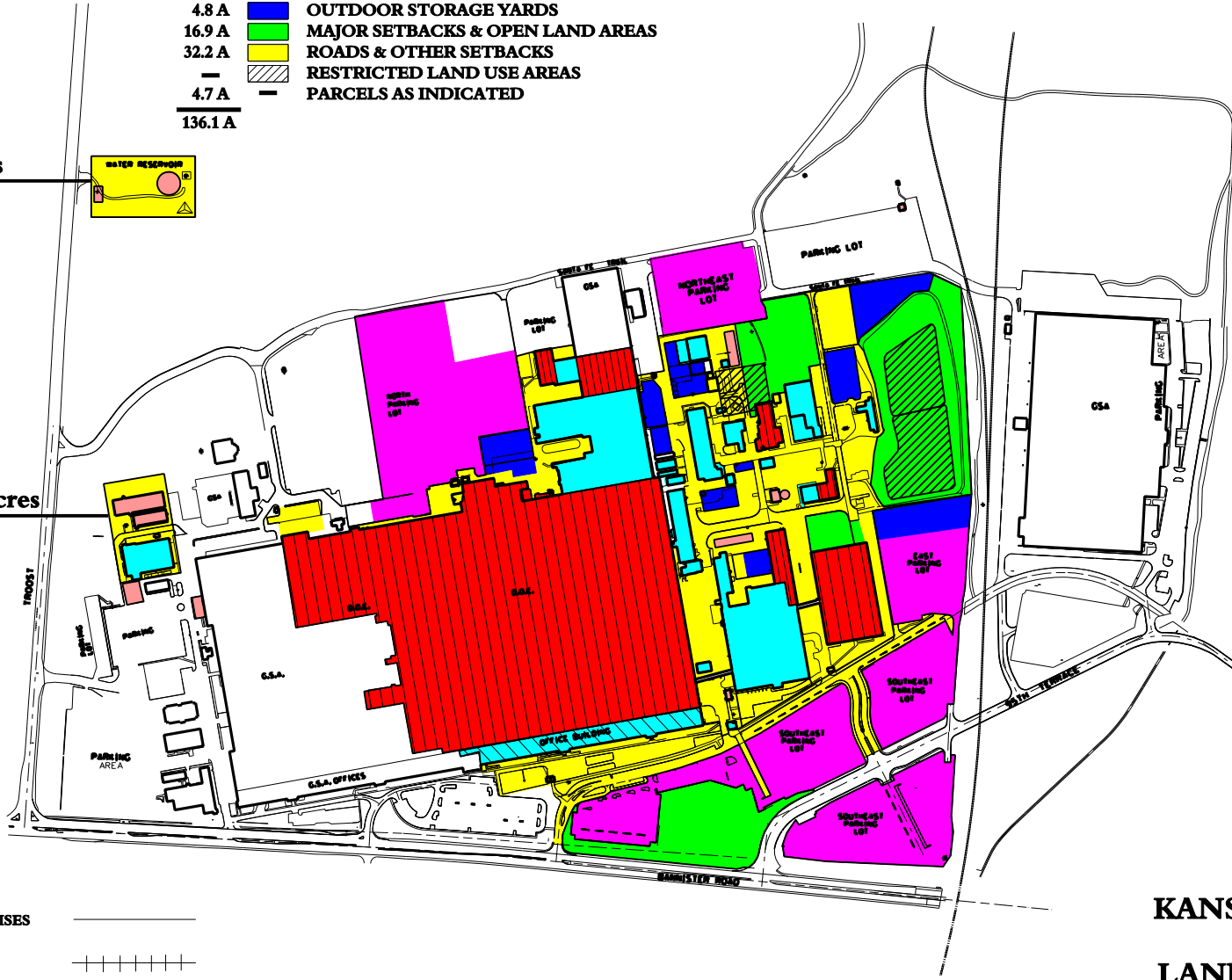
## ACREAGE

- 30.2 A  PARKING
  - 34.8 A  PRODUCTION
  - 11.9 A  ADMINISTRATIVE, LAB AND SUPPORT AREAS
  - 1.8 A  ADMINISTRATIVE
  - 1.0 A  MAJOR STRUCTURES
  - 4.8 A  OUTDOOR STORAGE YARDS
  - 16.9 A  MAJOR SETBACKS & OPEN LAND AREAS
  - 32.2 A  ROADS & OTHER SETBACKS
  - RESTRICTED LAND USE AREAS
  - 4.7 A  PARCELS AS INDICATED
- 136.1 A**

2.3 Acres

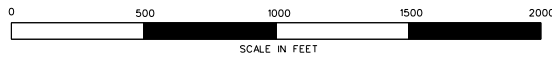


2.4 Acres



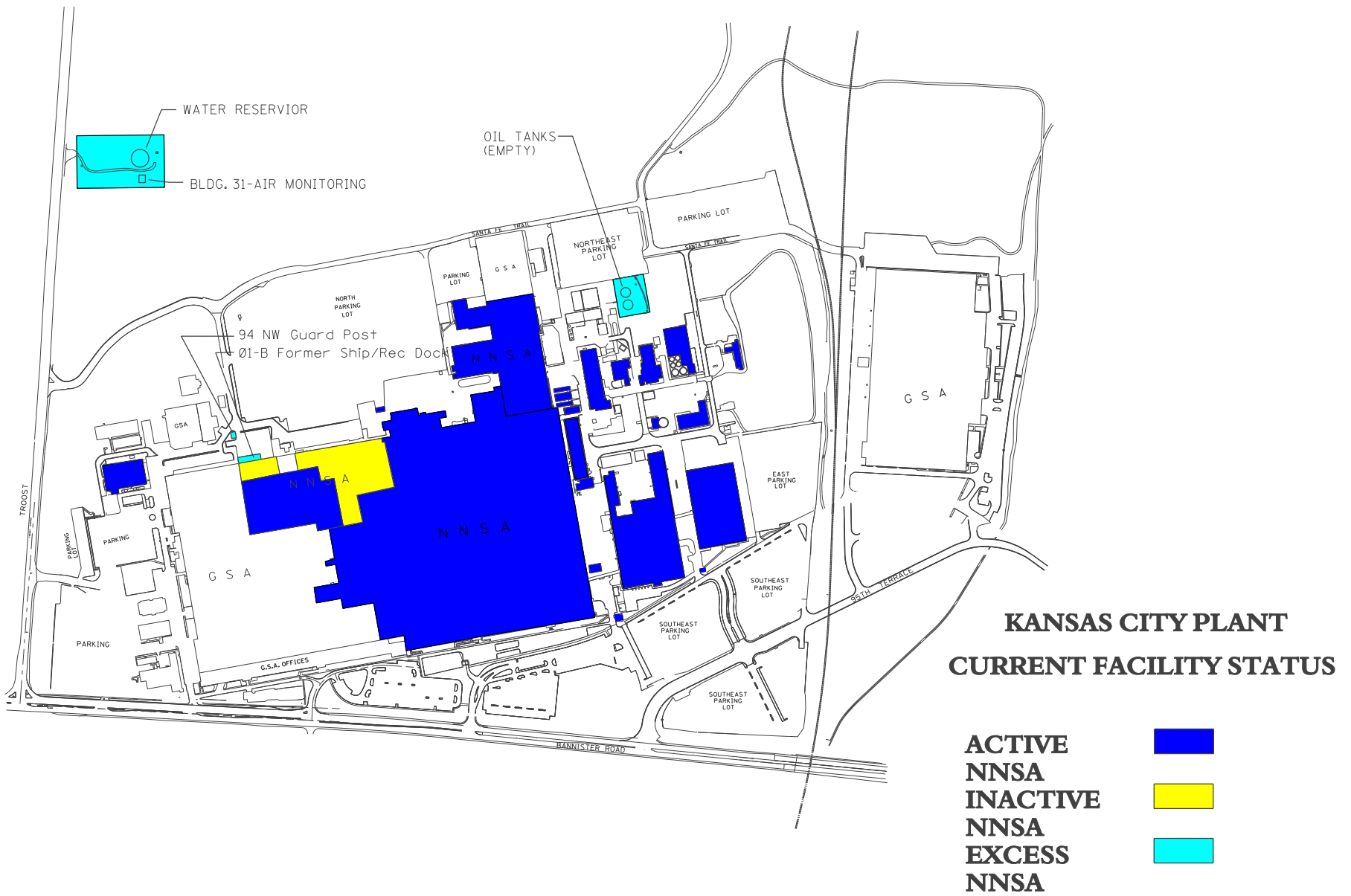
## KEY

- PROPERTY LINE-PREMISES
- RAILROAD TRACKS
- FENCE LINE



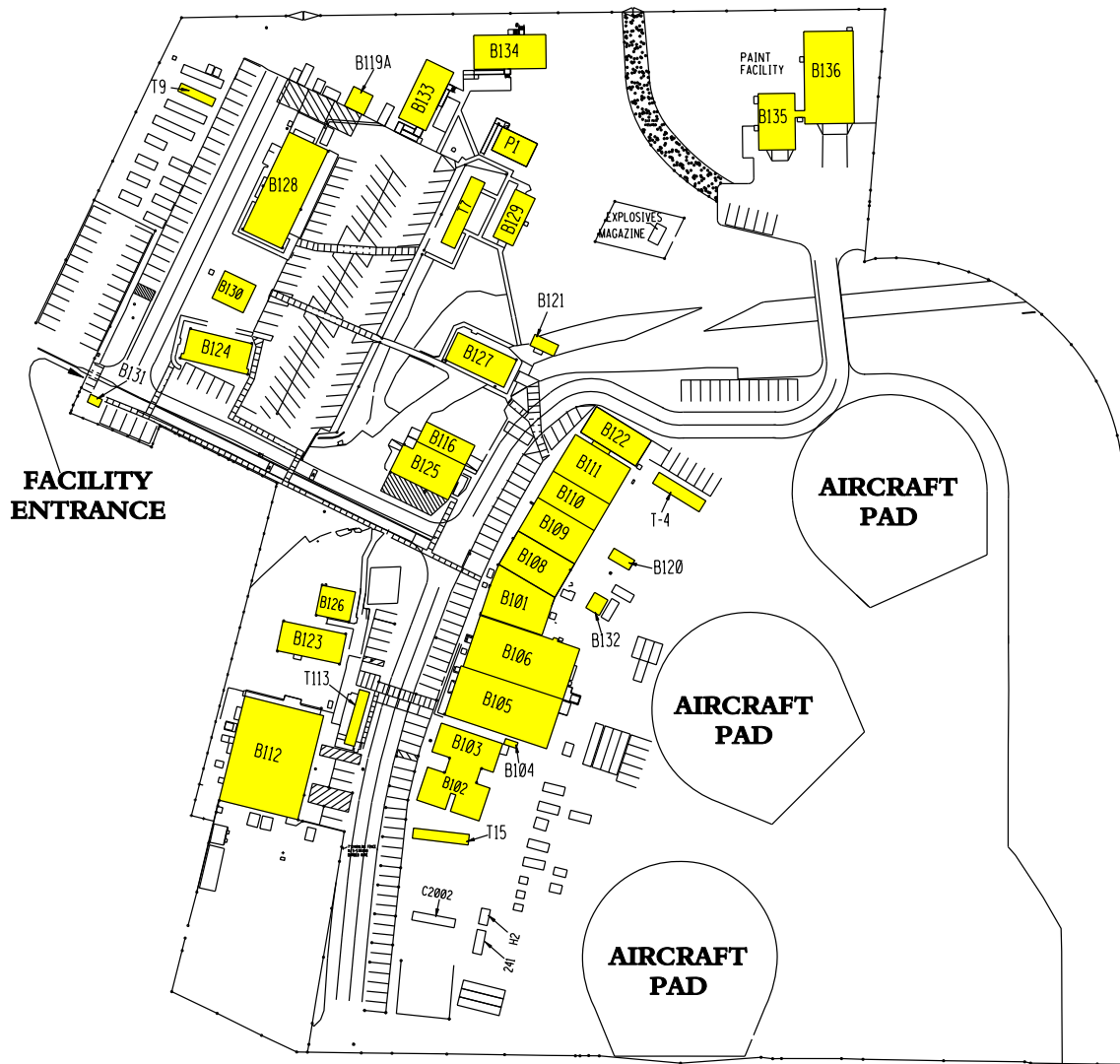
# KANSAS CITY PLANT LAND UTILIZATION MAP

Figure 13



**Figure 14**





**LEGEND**  
**BUILDINGS**   
  
**KIRTLAND OPERATIONS**  
**18.2 Acres**  
  
**SITE MAP**



**Figure 15**

## **4.2 Site Footprint Management / Excess Facilities Disposition**

### **4.2.1 Site Footprint Management**

#### **Kansas City Plant (KCP)**

The KCP has a centralized Facilities and Space Planning Organization. Most of the site floor space is within three interconnected buildings, which greatly simplifies the challenge of site-wide integration. Facility and infrastructure requirements are identified by the operating departments and submitted to the Finance Division as part of the annual construction budget call for construction Line Items, General Plant Projects, and other infrastructure projects.

Departments requesting changes in space or in configuration submit a request for feasibility and cost study. These requests are generally submitted with a preliminary space requirement (size, configuration and process flow) and justification. Requests are analyzed by the Facilities Engineering Program Management group (consulting with the weapons Program Management organization, as needed) to assess the need, timing, location, and establish project priority. This process to manage floor space results in minimal increases to operating departments.

Depending on the scope of work to be performed and the cost, projects are submitted as either expense funded projects, General Plant Projects or Line Items. However, due to the Pause Plan philosophy, the majority of future projects have been placed on hold.

There are no major facilities being constructed at the KCP requiring start-up. Most projects at the KCP are rearrangements of existing operations and the start-up becomes a simple process conducted as rearrangements are completed.

Facility modifications required to support the current LEP workload have already been completed, or should be minimal in the future. In addition, no new facilities for the support of any future mission assignments are being considered for the current facility. Planning will instead focus on the new facility. Projects will only be executed to ensure that the existing plant infrastructure is adequately maintained through FY 2012. KCP transformation is expected to reduce the KCP footprint from the existing 3,156,749 gross square feet to 1,407,600 rentable square feet (including the NSMC building), as shown in Attachments B and E. The current footprint of the KCP is not expected to change prior to relocating to the new facility.

#### **Kirtland Operations (KO)**

Kirtland Operations facilities are described in Section 4.1.1, General Site Description. The facilities located in Albuquerque are adequate and will continue to be used primarily for light fabrication and laboratory, and office activities while awaiting their consolidation at the ATTC. Planning is underway to transition operations at those facilities to the ATTC in FY 2011. (The ATTC is discussed in more detail in Section 4.2.3, Future Space Needs.) Leases for the Craddock and Air Park properties will be terminated once those facilities have been vacated. KO will support NA-40 operations at the remaining NC-135 Site where site boundaries will be redrawn to accommodate those operations in buildings 133, 134, 135, 136 and P1. See KO Attachment E-1a for a listing of NC-135 Site buildings that will become excess to NNSA once the ATTC consolidation is complete in FY 2011. KO is currently seeking an extension to the

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NC-135 Site permit from the Air Force until planned ATTC consolidation is complete. With the current NC-135 Site permit expiring on September 30, 2008, and permit extension not likely; KO is developing alternative solutions to satisfy space needs should the ATTC encounter any setbacks.

The Los Alamos Office remains adequate for current Los Alamos National Laboratory programs. The present lease ends in June 2009. Leasing actions, including approvals, for a new lease will begin well in advance of the current lease expiration to ensure space is secured for ongoing programs.

### **4.2.2 Leased Space**

#### **Kansas City Plant (KCP)**

The KCP leases approximately 231,233 square feet of GSA assigned space in the Bannister Federal Complex. This space is contiguous with the NNSA owned space in the main manufacturing building. GSA's lease rate is minimal (see KCP Attachment E-3). Once vacated, this space will be returned to the GSA.

#### **Kirtland Operations (KO)**

Kirtland Operations leases three properties. The Craddock and Air Park facilities will be vacated and leases terminated with the consolidation of Albuquerque KO activities at the ATTC in FY 2011. The Los Alamos Office lease expires in June 2009. A new lease will be sought for this activity should the need continue.

### **4.2.3 Future Space Needs**

#### **Kansas City Plant (KCP)**

The KCRIMS planning has determined that a new facility of approximately 1.1 million rentable square feet is required to more efficiently support the NNSA future mission. A new facility for the NSMC of approximately 300,000 rentable square feet will also be required to support other National Security missions and will be constructed on the same site as the KCRIMS facility. The KCRIMS selected alternative is the construction of the new facilities in the Kansas City Metro area utilizing the GSA Lease process. This alternative received CD-1 approval on March 30, 2007. The prospectus for the new facilities has been approved by the Office of Management and Budget and both houses of Congress. The National Environmental Policy Act (NEPA) requires officials to consider the environmental consequences of proposed action prior to making decisions. The GSA, as the lead agency, and the NNSA, as a cooperating agency have prepared an Environmental Assessment (EA) to evaluate the potential environmental impacts associated with the KCRIMS project. GSA and NNSA recently approved the final EA and a Finding of No Significant Impact (FONSI) was signed by GSA and NNSA in April 2008.

Facility sizing has been determined based upon the identification of critical spaces and associated square footages for each.

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Critical functional spaces include the following areas:

- Administration and Support
- Assembly & Electrical Fabrication
- Excess & Reclamation
- Labs & Engineering Labs
- Manufacturing & Gas Transfer Systems
- Maintenance
- Packaging
- Paint & Heat Treat
- Purchases & Other Inspection
- Refurbishment & Dismantlement
- Rubber & Plastics
- Special Material Production
- Stores
- Test Equipment, Gage, & Metrology

Operations and Types of Spaces identified in each of the options are generally described as follows:

- Administration and Support – includes offices, conference rooms, restrooms, fitness center, data center, patrol headquarters/command center, cafeteria and vending, break rooms, waste management, industrial waste pretreatment facility, reverse osmosis facility, medical and printer/file/storage rooms.
- Assembly & Electrical Fabrication – includes electronic manufacturing and assembly areas along with inspection and testing of small and medium sized electrical components. Class 100, Class 10,000 and Class 100,000 Clean Rooms are also included in the area.
- Excess & Reclamation – contains shredding, grinding, milling machines and furnaces to process materials for reclamation and excess.
- Labs & Engineering Labs – Includes lab furniture, fume hoods, ovens, and testing equipment for chemical, mechanical, vibration and shock testing.
- Machining and Gas Transfer Services – includes heavy machining, welding and other material production operations. Temperature and humidity controlled modular rooms are required for inspection areas.
- Maintenance – supports operations for the entire complex, maintaining and reconstructing facilities and equipment in support of the mission. Area includes battery dock, mechanical and electrical cribs, janitorial closets, and maintenance shops.
- Packaging and Shipping – manufactures cardboard boxes and wooden crates to package and ship large and small parts.
- Paint and Heat Treat – Paint and Heat Treat involves the preparation of parts for painting. Paint requires special temperature and humidity requirements for several paint booths. Heat Treat requires media blast booths with dust collectors, heat treat and quenching operations.

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- Purchase and Other Inspection – accepts incoming and in-process production material, parts and equipment. The area requires modular rooms with special temperature and humidity requirements, a leak test and x-ray area. A bulk inspection area will have small amounts of explosives and precious materials that will require a higher security.
- Refurbishment and Dismantlement – includes bench top disassembly areas along with inspection and testing of small and medium sized electrical components.
- Rubber & Plastics – includes injection molding, presses, ovens and autoclaves to produce parts.
- Special Materials Production – includes chemical labs, material processing areas, oven rooms, foam processing, and raw and finished material storage areas. Some areas will have a high hazard classification that will also require a deluge system for fire protection and spill containment within the area.
- Stores – includes the inventory and storage management including pallet racking and automated storage retrieval system. Stores will also manage an ancillary outdoor covered storage facility used to contain large materials stored on site. Chemical stores will require several bunkers/rooms with different temperature and humidity requirements for the storage of various chemicals.
- Test Equipment, Gage, and Metrology – includes test equipment prove-in, maintenance and equipment Calibration. Rooms are required for prototyping, encapsulation, engraving, coordinate measuring machine labs, main gage lab, dimensional lab, laser and optics, and shaker areas.
- White Space (Office) – this space is available for expansion of the office and support areas.
- White Space (Manufacturing) – this space is available for expansion of the manufacturing departments or for new operations.

See Section 4.2.4, New Facility Planning for additional information.

### **Kirtland Operations (KO)**

In FY 2011, Kirtland Operations' activities in Albuquerque will be consolidated along with OST within NNSA's ATTC. The ATTC will satisfy the majority of KO's space needs including Safeguards Transporter (SGT) refurbishment currently being performed at the KCP. (SGT refurbishment will transition to KO oversight into the ATTC also in FY 2011.) The need for space to support NA-40 operations will be satisfied by a reduced NC-135 Site, containing buildings 133, 134, 135, 136 and P1.

At the ATTC, OST will be the lead federal host and will sign an Occupancy Agreement for a 20-year arrangement with GSA who will hold the lease with the developer. Facilities and infrastructure reporting for all ATTC space, including that of its tenants, will be provided by OST. Also joining OST and KO at the ATTC will be segments of NA-10 headquarters offices, and NA-42 Office of Emergency Response. The ATTC will accommodate approximately 660 people, of which up to 280 will belong to Kirtland Operations. Kirtland Operations will occupy approximately 180,000 rentable square feet (RSF) of the total 285,000 RSF that is planned. The total area of the ATTC was reduced in FY 2008 from the 307,000 RSF when OST decided to

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remove its Agent Operations Western Command, the Mobile Electronic Maintenance Facility, and the Vehicle Maintenance Facility from the ATTC due primarily to security concerns.

### **4.2.4 New Facility Planning**

Acquisition of a new, modern, flexible manufacturing facility is the visible cornerstone of the KCRIMS transformation program. While the current facility has served the mission well for the last six decades, the costs to maintain and reconfigure the facility in a responsive manner have become excessive relative to the costs of the primary production mission.

The new facility is the pacing item that will enable many of the other business savings. A critical step in the facility transformation process is to establish a comprehensive set of operating requirements. These “program of requirements” or PORs as they are often referred to in the construction industry were developed using an iterative process, but the primary and overriding requirement for the new non-nuclear production facility was that it be designed and constructed for flexibility that will enable rapid, economical reconfiguration to meet changing production requirements. This requirement took precedence over optimizing the operational profile for the current set of production capabilities and remains key to the transformation of the Kansas City Plant.

The default facility requirements are those typical of a commercial manufacturing environment. This is important to minimize construction expense and maximize the residual value of the facility should the NNSA no longer have a mission need for it. In the course of requirements development, analysis was performed to determine the proper tradeoff between acquisition costs and long-term operational costs.

Development of PORs occurred in phases and was somewhat of an iterative process between space providers and space customers. The facility transformation team formulated those requirements with the use of a database to capture critical parameters on capital equipment and operating requirements for the facility. The requirements included items such as total space, clear height, major operational demarcations, and plant environments.

A major achievement of the manufacturing transformation teams through the development of the PORs was the validation of the sourcing decisions by determining that retained capabilities would fit in the proposed new facility envelope. In most areas, and in total, the teams were able to fit the retained capabilities in approximately the same space that was estimated. The space planning also has allowed for up to 100,000 square feet of “white space” that has portions interspersed in critical operational areas and large areas that are unassigned for any currently known use. This will allow the new facility to have considerable flexibility and be responsive to the changing needs of the complex from the very beginning, including the ability to add entirely new product lines that cannot be foreseen at this time.

The overall facility acquisition schedule is shown in Figure 16.

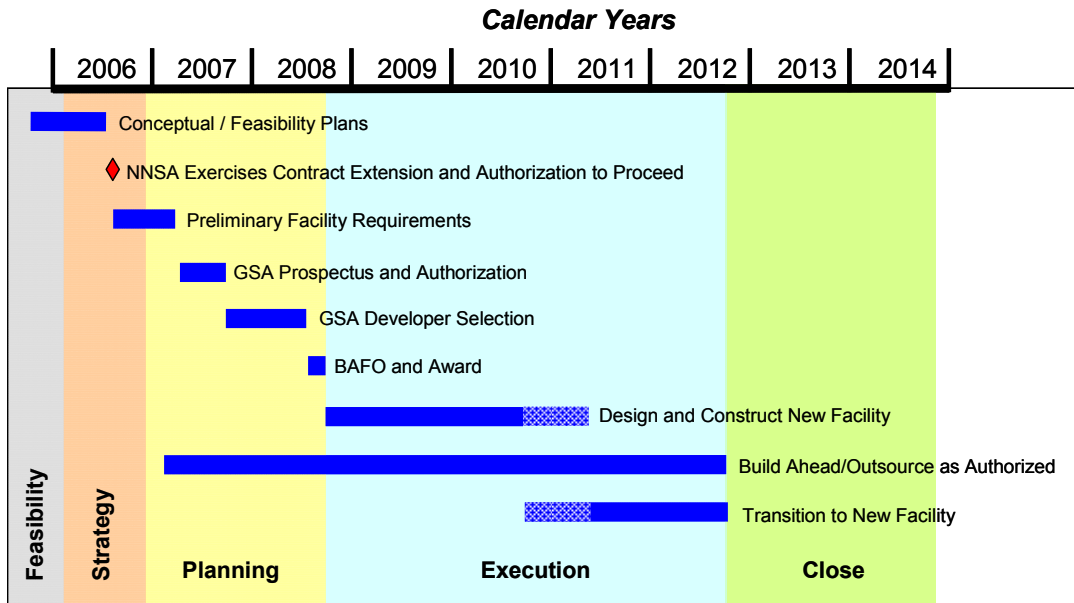


Figure 16 – KCRIMS Project Schedule

#### 4.2.5 Disposition Planning

The KCP has an ongoing mission to provide non-nuclear manufacturing capability to support the NNSA weapons programs. However, in light of the KCRIMS plan described in Sections 3.1.7, KCP Transformation – KCRIMS, preliminary planning activities for the disposition of the BFC have been initiated. A proposed action for the disposition of the BFC has not been determined. The results of the initial planning efforts are being included to ensure awareness at all levels of the potential future funding needs. In any event, it is envisioned that normal asset disposition processes and studies used by the General Services Administration (GSA) and NNSA will be employed.

The initial step in the GSA real property disposition process was to conduct a Target Asset Review (TAR) of the DOE-owned portion of the Bannister Federal Complex. This review was completed and the final TAR was published on September 18, 2007. This document provides a link of asset data, regulatory compliance and decision support information to serve as an asset management tool. Information in the TAR will be used as a resource for other studies routinely conducted by GSA, such as asset reutilization/disposal and market assessment studies. One of these studies, a Disposal Options Study, has been completed and was published on October 23, 2007. The scope of this study included the entire Bannister Federal Complex, including those parcels owned by the GSA, and was developed to assess the various disposal options for the property and facilities and to recommend the highest and best future use. This analysis looked at the feasibility of nine transaction scenarios and concluded that the fee simple sale of the entire property was the most beneficial disposal alternative for the government.

As part of the early business planning effort associated with KCRIMS, the NNSA published the “NA-56 Review of the KCRIMS Project Legacy Planning Scenarios” report (NA-56 Review), dated December 1, 2006. The NA-56 Review provided a rough cost estimate of three legacy planning scenarios. These scenarios included facility deactivation, partial demolition and/or reuse of the facility, and demolition of the entire KCP facility. Recommendations made in the

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NA-56 Review for further study of alternatives and market analysis aligned well with the GSA asset review and study processes described above. Based on the recommendations made in the Disposal Options Study, the KCP is proceeding with disposition planning with a primary focus on sale or transfer of the excess property and facilities.

It is recognized that federal excess property regulations and processes must be followed during the disposition process and that environmental requirements for long term stewardship must continue to be satisfied. Discussions with GSA and the regulatory agency stakeholders will be pursued to ensure these requirements are satisfied throughout the process. At this time it is envisioned that GSA will be enlisted as the disposal agent for the NNSA-owned real property.

It is also recognized that Scenario 2 of the NA-56 Review included a description of possible improvements to the site that would be exercised prior to disposition of the property. Included in this scope are activities to prepare the site for sale or transfer. These types of activities include cleaning of chemical contaminants such as PCBs or beryllium on infrastructure surfaces. Also included in these improvements would be the demolition of a number of outbuildings that may ultimately be deemed to be of limited market value due to the mission-specific features of the layouts, or the cost to remove the residual chemical contamination from the infrastructure of the buildings once vacated. The specific buildings slated for demolition and the cost estimate for this scenario is considered to be a bounding case.

At this time, recognizing that additional analysis of both the market and the site could reduce the scope of the proposed improvements, it is not anticipated that the entire scope of the planned improvements as described in Scenario 2 of the NA-56 Review would need to be exercised. However, for planning purposes, a forecast of costs to implement these improvements in FY 2012 is being included in this TYSP as a bounding case. The forecasted cost of \$52 million would rely on a mix of RTBF-ISS and Transformation Disposition (TD) funds. For planning purposes only, the end of FY 2013 is being shown as the sale or transfer date for NNSA owned property at the BFC. At the same time, significant emphasis is being placed on planning that will complete preparations and release of the site for sale at the earliest possible date.

In addition, RTBF funds would be required, beginning at the end of FY 2013, to maintain the facility in a safe and marketable condition, and continuing until sale of the property. Finally, NA-56 currently provides \$2 million per year for long term stewardship (LTS) activities, such as groundwater monitoring and treatment.

### **Kirtland Operations NC-135 Site Disposition Planning**

Planning is underway to consolidate KO operations from the NC-135 Site into the ATTC in FY 2011. Buildings 133, 134, 135, 136 and P1 will be retained by the NNSA to support NA-40 operations at the remaining NC-135 Site where site boundaries will be redrawn to accommodate those operations. The remaining buildings (see KO Attachment E-1a) on the NC-135 Site will become excess to the NNSA mission in FY 2011. A project was developed and first appeared in the FY 2006 TYSP to disposition NNSA assets on the NC-135 Site. This project, originally estimated at \$1.3 million, will be updated to include the new scope and costs determined by decisions occurring during this TYSP development phase. Transformation Disposition (TD) funds will be requested and execution would be planned to commence upon completion of KO relocation to the ATTC.



#### **4.2.6 Environmental Long Term Stewardship (LTS) Program**

Long term stewardship includes those activities necessary to protect public health and the environment from site hazards. Activities include monitoring, maintenance, institutional and engineering controls, information management (including records maintenance) and other activities to ensure that implemented clean-up remedies remain effective over time.

The remediation strategy at the KCP under the Environmental Management program was to remove easily accessible (shallow) areas of chlorinated solvent and/or polychlorinated biphenyl (PCB) soil contamination while other contaminated areas of soil immediately adjacent to and under active operating buildings were allowed to remain. Contaminated groundwater at the site is contained by a series of pumping wells that capture groundwater and transport it to a common point for treatment and disposal. Numerous other groundwater collection points are also captured for treatment. These include building footing tile drains, non-storm event flows in stormwater outfall 002 and an area of groundwater seepage along a railroad embankment northeast of the facility. Stormwater conveyance systems are required to be structurally maintained and monitored to assure that permitted discharge limits are met. Monitoring of groundwater from numerous monitoring wells within the Bannister Federal Complex as well as monitoring of stormwater discharges, surface water and sediments from three water bodies that surround the facility is also performed. A series of institutional and engineering controls have been implemented throughout the Bannister Federal Complex to limit exposure to remaining contamination sites and to protect individuals from exposure to these areas.

All environmental clean-up activities at the site have and continue to be mandated by the Resource Conservation and Recovery Act (RCRA). The KCP has a Missouri Hazardous Waste Management Facility Part I Permit administered and overseen by the Missouri Department of Natural Resources. The permit mandates the components of the LTS program described above.

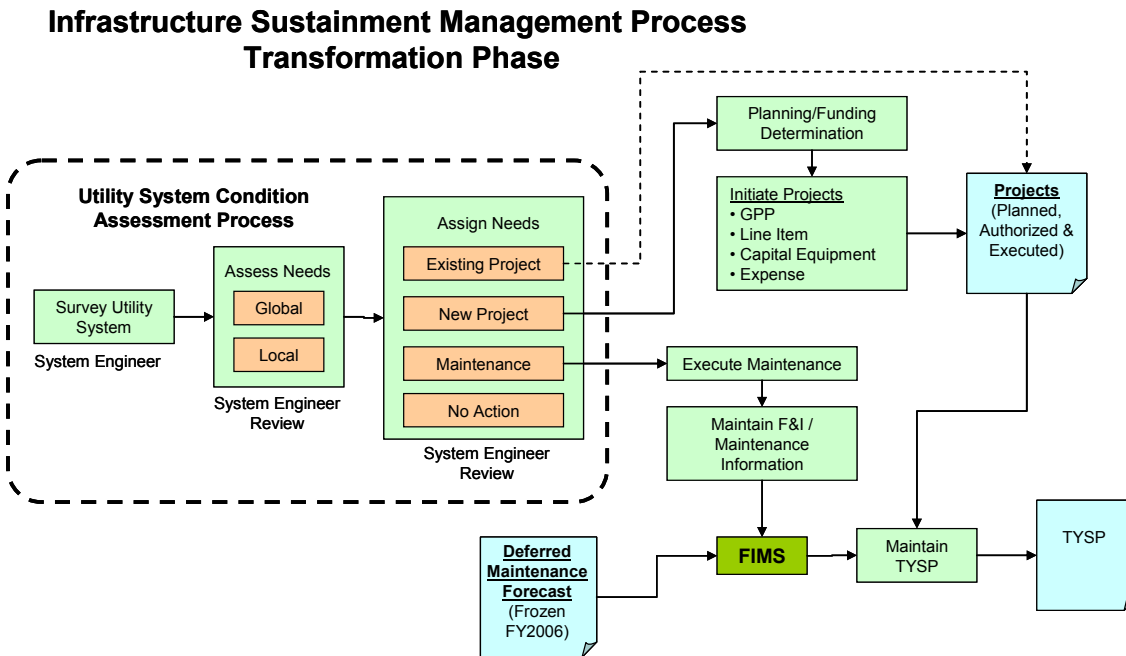
Costs for LTS remain relatively constant throughout the program with additions in specific out years for cyclical activities such as replacement of the groundwater treatment system. The FY 2008 budget, funded as a weapons' Line Item by NNSA NA-56 (Office of Environmental Projects and Operations), currently has authorized \$1 million funding and has forecasted an additional \$1 million to be authorized no later than June 2008. The program requires \$2 million average annually for LTS activities.

#### **4.3 Deferred Maintenance Reduction / Facility Condition**

KCP and KO facilities and infrastructure are adequate and suitable for the NNSA assigned mission and will continue to be used primarily for manufacturing, storage and office activities in support of that mission. As currently planned, by the end of FY 2012, KCP operations will be relocated into new leased modern manufacturing facilities. Existing NNSA-owned World War II era facilities that have been occupied and maintained by the KCP for more than 60 years, will have been vacated. During the interim the KCP has discontinued identification of new DM for the existing site where DM will continue to increase. Upon completion of disposition, approximately \$230 million in DM, for the vacated facilities, will have been satisfied. Since facilities at the new site will be leased, DM tracking and forecasting for facilities will no longer be necessary.

### 4.3.1 Deferred Maintenance (DM) Reduction

With the planned relocation, all facilities and infrastructure related Line Item and General Plant Projects have been deferred or postponed indefinitely. No new FIRP projects will be started and FIRP funding has been reprogrammed to other sites. The KCP infrastructure sustainment management process, Figure 17, has been modified appropriately to provide for management of KCP assets during the KCP transformation period FY 2007 through FY 2012. DM is being allowed to rise, during the transformation period, since the plant is now in a managed equipment lifecycle mode with the exception of centralized utility and safety systems.



**Figure 17 – Infrastructure Sustainment Management Process**

Historically, the primary focus for the development of facilities and infrastructure projects has been to keep the production capabilities viable for the long term. Since the onset of FIRP, additional emphasis on reducing DM has also influenced which projects were funded. During KCP transformation, neither the long term viability of the infrastructure systems or the reduction of DM is sufficient justification for recapitalization projects. Instead, the KCP focus is now on executing projects that address code compliance issues, safety issues, preserving the central infrastructure systems, or that maintain the integrity of the building envelope. At the same time, there is a need for projects to keep critical departments operational. Projects, identified now, are being defined and executed in a reactive short-term response mode as driven by an immediate need, a shift from the proactive and long-term strategy of the past. Mission critical facilities will be maintained as needed for mission support and allowed to decline otherwise until those facilities are vacated. Safety and security issues will be given priority and remedied in a timely fashion.

The KCP established a FY 2003 DM Baseline of \$89.5 million. Resources were applied toward DM reduction and the KCP was able to reduce the DM baseline backlog and stabilize DM primarily through application of FIRP program funds. With the planned relocation to a new facility and the existing facility in a managed equipment lifecycle mode, there will be a steady

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rise in DM for the existing facility. The DM forecast has been updated to reflect the end of FY 2006 including projections for out-year DM based on the revised infrastructure management approach. The FY 2006 DM forecast has been carried forward in this year's Attachment F.

Completion of KCP relocation to new facilities, planned for the end of FY 2012, will have a significant impact on DM. Once relocation is complete, items previously considered deferred will no longer be required. When relocation to the new facility is complete, DM not needed to meet ES&H and environmental monitoring requirements will be retired. This is reflected in the Attachment F forecast where in FY 2013, after planned KCRIMS relocation is complete, DM is reduced to the estimated minimum necessary to meet ES&H and environmental monitoring. After the existing site is vacated, the NNSA will incur an ongoing maintenance and surveillance cost until disposition is complete. Refer to Section 4.2.5, Disposition Planning for additional information. At the new site, DM will initially be zero. DM for leased real property will not be tracked or forecasted.

### **4.3.2 Kansas City Plant (KCP) Condition**

KCP facilities and infrastructure are currently suitable for the NNSA assigned mission and although they have been maintained to support long-term continual operation at the site, this strategy has changed. The KCP will be relocating to new facilities by the end of FY 2012. Condition of mission critical facilities is currently adequate for LEP completion and mission critical facilities will be maintained as needed for mission support and allowed to decline otherwise until those facilities are vacated. Recapitalization projects have been postponed indefinitely. As stated above, safety and security issues will be given priority and remedied in a timely fashion.

Condition surveys will continue to be performed by Utilities Engineering and Maintenance on central utility systems to identify and prioritize repair and replacement of critical system components. Surveys will focus on sustaining Powerhouse central systems, roofing systems, environmental remediation systems, structural/seismic systems and safety/code compliance systems with a managed equipment lifecycle approach balanced by LEP program completion requirements for the remaining plant equipment/systems.

### **Current Condition**

The KCP utilizes owned and leased floor space. Of the total 3.1 million square feet of KCP floor space, the owned floor space of 2.9 million square feet, as categorized in FIMS by FCI, is as follows. For all buildings including all mission dependency categories, 20% of the gross floor space is considered excellent, three fourths of one percent is good, 60% is adequate, 11% is fair, and eight percent is poor. Eighty six percent of the owned floor space is categorized as industrial/production/process. This floor space is rated as 22% excellent, 70% adequate, and eight percent poor. Looking at mission critical assets alone, 13% of the gross floor space is excellent, 78% is adequate, and nine percent is poor. A summary of the current condition of NNSA owned floor space by condition and use category can be acquired by requesting a FIMS 027 report. The condition of floor space by building is itemized in the FIMS 092 report. It must be noted that DM was forecasted and tracked for only major facility and infrastructure components. Buildings shown as "Excellent" for condition on the FIMS 092 report do not have any major facility DM and therefore, FIMS computes the condition of these buildings as

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“Excellent” (Condition = DM / RPV). The actual condition of these buildings is fair to adequate based on a condition survey that takes into account all aspects of the building.

### **Future Condition**

Now that the KCP has entered the transformation period (FY 2007-2012), the focus has shifted to executing projects that address code compliance issues, safety issues, preserving the central infrastructure systems, or that maintain the integrity of the facilities envelope. Projects to keep critical departments operational will continue to be developed but the nature has shifted from proactive and long-term to more reactive and short-term or quick-response as driven by an immediate need to support programmatic work. The DM forecast, that is being carried forward, reflects anticipated future growth based on the infrastructure maintenance posture that is in place as a result of KCP transformation. Once relocation to the new leased KCRIMS facility is accomplished in FY 2012, facility condition will be excellent.

### **Utility Condition**

Many of the KCP utility systems are centralized and therefore must be maintained viable to support those mission critical areas required to build out the LEPs prior to plant relocation. KCP utility systems condition information is contained in the Utilities Management Plan (UMP). This plan provides the base definition of KCP utilities and contains detailed physical descriptions of each utility or system. It also provides details of expected operation, condition statements, and deficiency listings that are the foundation for both long-range and short-term planning processes. The age, current condition, reliability of existing equipment, risk of system failure and the impact of deficiencies on the system are tabulated. This provides justification and specification for planning and serves as the basis for the formal budgeting process. The UMP provides the basis for managing component and system risks by eliminating deficiencies and ensuring those systems remain as reliable and efficient as necessary to complete mission assignments until no longer needed.

### **4.3.3 Kirtland Operations (KO) Condition**

The general condition of KO facilities and infrastructure is adequate for the NNSA assigned mission pending the move to the ATTC in FY 2011. Required maintenance is performed on KO facilities to ensure their condition remains suitable. KO has no deferred maintenance at this time.

For real property management and reporting, information on KO real property assets is entered, maintained and verified in FIMS to meet the FIMS criteria. However, the FIMS summary condition survey for KO assets is misleading because deferred maintenance is entered as zero for each KO facility resulting in the summary condition of “excellent” for each property on the FIMS 092 report. The condition is “excellent” in the case of newer facilities; however, the general condition of facilities is adequate. The future condition of KO facilities in Albuquerque will become excellent through their consolidation at the ATTC.

### **4.4 Maintenance**

KCP maintenance personnel are responsible for maintaining KCP facilities and infrastructure as well as the equipment supporting manufacturing, development and administrative work. During

transformation, as the KCP is relocated from the existing to the new KCRIMS facilities, there will be a period during which maintenance at both sites will be performed concurrently. Traditional maintenance at the existing plant and planning for concurrent maintenance during the transition are both discussed in the following sections.

#### 4.4.1 Maintenance Overview

The KCP maintenance organization provides three-shift, 24-hour service. This organization maintains and repairs more than 35,000 pieces of production and non-production equipment. It is responsible for corrective, preventive, and predictive actions on piping and electrical distribution systems, chillers, boiler and steam systems, cooling towers, and the fire alarm system. Maintenance is also responsible for general plant upkeep including lawn care, furniture and equipment relocations, snow removal, and any other activity required to support stewardship of the facility.

The breakdown of activities within maintenance; general maintenance, maintenance management, corrective, predictive and preventive maintenance are expected to remain relatively stable for the immediate future. Any increases to the production facility needs or in-plant mission requirements will mean a corresponding adjustment to the maintenance resource mix to address these requirement changes.

Of primary focus to the facilities maintenance organization is the service provided to internal and external customers. Facility stewardship, rapid response to emerging customer requirements, and maintaining a safe, secure facility are essential to supporting the KCP as it operates in a rapidly changing cost-centered environment.

The KCP maintenance business model is structured around the Site Specific Maintenance Standard. The Standard incorporates objectives which reflect the best practices and standards of world class maintenance organizations. The Standard addresses seven maintenance program elements:

- Organizational Structure & Administration
- Physical Asset Inventory and Condition Assessment
- Identification and Prioritization of Maintenance Work
- Work Execution
- Preventive / Predictive / Corrective Maintenance
- Control of Maintenance Data
- Performance Measurement & Continuous Improvement

These elements provide the guidance for the maintenance of facilities, structures, components, installed equipment, programmatic equipment and systems such as utilities, fire protection and security systems.

The maintenance management program has adopted the Integrated Safety Management System and has made it a central feature of maintenance work performance for both employees and sub-contractors.

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ISO 9001 formality drives the process description and work instruction structure at the KCP. ISO 14001 formality drives all safety processes at the plant. Command Media, accessed through a plant-wide intranet portal, contains the process descriptions and work instructions used by the maintenance organization.

The maintenance organization utilizes a Computerized Maintenance Management System (CMMS), MAXIMO, to receive, classify, identify, estimate, approve, schedule, track accounts and report all work throughout the facility maintenance process. MAXIMO is comprised of tools, techniques, checks, management controls and documentation needed for effectively managing the workflow with an automated system.

Work generation is the process of determining the maintenance workload in the maintenance management system. A part of work generation is documenting the workload in the CMMS. Maintenance work is comprised of recurring and nonrecurring maintenance work. Recurring work includes PM, Predictive Maintenance (PdM), building maintenance and housekeeping, and central utility plant operation and maintenance. The recurring maintenance programs, customer needs and facilities and equipment failures generate nonrecurring maintenance work in most cases.

MAXIMO resides on KCP network computing systems and is accessed through the plant's intranet portal. All plant employees have access and may submit maintenance requests, as needed.

Preventive maintenance and other recurring maintenance activity are generated at prescribed frequency through MAXIMO. Preventive maintenance activity may consist of route-based tasks involving numerous pieces of equipment or may be performed on a single piece of equipment. Consolidation of equipment into groupings or routes is made to create efficiencies in labor use.

Approximately 35,000 pieces of equipment are contained in the master equipment list (MEL), of which approximately 14,000 pieces are included in the PM program.

Non-system generated work requests made to MAXIMO which are not identified as part of the maintenance PM program are categorized into specific groupings and assigned for work. Work requests received in MAXIMO are routed to a central planning group and assigned to the appropriate maintenance work center. These are located throughout the facility and are in most cases geographically situated near customer departments.

Priorities for maintenance work requests are determined through use of the maintenance priority schedule which is used at the time of work order input, and is accessible through the MAXIMO application. The maintenance priority schedule was developed based on a cross-functional needs process with regard to production operations, ES&H considerations, security requirements as well as general facility stewardship as the criteria for any prioritization.

Improvements to the maintenance management program are ongoing. The KCP has implemented an aggressive Six Sigma program across the site, with numerous teams addressing process improvements for maintenance activities. Internal and external assessments are also ongoing and issues which are identified are evaluated, actions are taken and tracked to a successful conclusion.

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The Maintenance continuous improvement strategy involves the vertical integration of performance metrics and improvements to the planning process for work orders. An optimum mix of reactive, time- or interval-based, condition-based, proactive maintenance and run-to-fail practices are applied in an integrated fashion to take advantage of their respective strengths in order to maximize facility and equipment reliability while minimizing life-cycle costs.

Maintenance relies on numerous performance indicators to monitor overall maintenance performance, and as the basis for measuring productivity improvements and managing costs:

- Backlog
- Preventive Maintenance Efficiency
- Corrective Maintenance Efficiency
- Maintenance Cost/Total Operating Cost
- Corrective Maintenance Cycle Time
- Preventive Maintenance Completed on Time
- Production Equipment Uptime

These interrelated metrics present a baseline for future measurement and for documentation. For example, efficient planning, including the ability to accurately estimate jobs, is crucial to establishing a credible backlog. To improve operating efficiencies, however, additional data are needed to track on-going maintenance activities as well as anticipate future maintenance issues. In addition to better accounting methodologies, all improvement initiatives continue to apply Six Sigma techniques to improve maintenance efficiencies and accomplish more for the same cost.

Maintenance backlog is the day-to-day workload of the maintenance organization. It includes customer and system-generated work that has been requested but not started and work that is in progress but not completed at the time backlog is measured. All activity in the maintenance backlog is assumed to be valid work that will be completed unless cancelled or modified by the original requestor of the work. The six-year KCP annual maintenance performance for classical backlog is presented in Figure 18.

	<u>FY02</u>	<u>FY03</u>	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>
<b>Backlog in (\$000)</b>	727.5	543.5	523.4	520.5	520.1	596.9
<b>Past-Due Maintenance Backlog</b>	NA	59.6	91.5	19.2	30.5	187

**Figure 18 – Maintenance Backlog**

The KCP maintenance organization is closely monitoring the corrective maintenance backlog and performance against preventive and predictive maintenance activity. Overall maintenance backlog is also tracked at the individual crew and department levels. The current level of maintenance backlog hours is appropriate for the current level of staffing, and provides the right balance between the daily work and the number and skill level of staff to do the work.

#### **4.4.2 Maintenance Transitional Planning**

The KCP is currently planning to move to a new, smaller and more efficient facility as part of Transformation planning. Consistent with the Responsive Infrastructure Plan document, the

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Maintenance/Operations organization will continue to provide full support of LEP production requirements and facility stewardship, in the existing facility, to meet safety and code compliance and central plant reliability throughout the transition to a new facility. Other non-critical equipment and systems will be evaluated and Maintenance/Operations support levels will be adjusted to enable equipment life through LEP production at the existing facility through FY 2012. Further details of each maintenance element through the transition process are described below.

### **Utility Operations**

The KCP operates two central utility plants on site with three-shift, 24-hour service. The West Powerhouse (WPH) produces steam, compressed air and chilled water for environmental and process control in support of the plant mission. The East Powerhouse (EPH) produces chilled water and is the primary location for monitoring and operation of the KCP air handling systems. These utilities are delivered throughout the Bannister Federal Complex (BFC) to the various tenants who share the main building. In addition to providing heating and cooling capabilities, utility services for the Bannister Federal Complex, except for the GSA building at 2306 Bannister Road, are operated and managed by the KCP.

Operation and maintenance programs will be maintained at current levels for these systems. The remainder of the KCP utility systems such as air handling systems will be maintained and operated to achieve LEP program completion, but not for long term stewardship. It is expected that minimal operational changes will be experienced through the LEP production period; however, the focus will change from eliminating deferred maintenance to repair and replacement of components necessary to maintain operating conditions through completion of the LEP's.

Following 2012, KCP operations will shift to a "cold shutdown" state as LEP production activities cease. Powerhouse operations will be consolidated to the West Powerhouse at appropriate levels to provide BFC tenant's utility service while maintaining the KCP in a cold shutdown state. Also, the East Powerhouse will be taken out of service as the West Powerhouse has sufficient capacity to meet the requirements of those tenants remaining at the BFC. After 2013, powerhouse operations will no longer be staffed, managed or maintained by the KCP as a part of the production mission.

### **Production Equipment Maintenance**

Between now and 2012, maintenance of equipment supporting LEP production will continue as is. As excess capacity is identified, equipment will be placed in a "cold-shutdown" state and the preventive maintenance ceased. As equipment is identified for relocation to the new facility it will continue to be maintained for long term stewardship. Other production equipment used for development or research will be handled on a case-by-case basis. Maintenance will also continue to provide engineering and craft support for any new equipment installations (that's needed to support LEP deliverables) in the current facility. During the transition years, 2010 through 2012, Maintenance will provide support for equipment relocations with a focus on populating information in the MAXIMO system for equipment to be relocated.

After 2012, Maintenance will only provide engineering and craft support for production equipment in the new facility. It will no longer be necessary to support any production



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equipment left in the current facility since LEP production will have concluded. This remaining equipment will be put in a shutdown state and no longer maintained.

### **Infrastructure Maintenance**

#### **Buildings and Grounds**

From now through 2012, Housekeeping services will continue to perform to the same service standards that are in place today. Grounds maintenance, snow removal, and pest control will continue with the same level of service as today. Laborers will continue to be assigned to ensure 24/7 support.

While the KCP itself will not be responsible for any housekeeping, grounds maintenance or pest control services at the current facility beyond 2013, it is anticipated that NNSA will continue to have this responsibility during property disposition.

#### **Infrastructure Systems**

From now through 2012, maintenance of the high voltage electrical system, plant security systems and radios, and emergency and life safety will continue as is. Support of requests for the installation of new cabling and security systems will be reviewed on a case-by-case basis to ensure this work is required to support the LEP workload and to maintain plant security systems to applicable standards and requirements.

Painting will be completed on a limited basis to ensure a positive impression of the facility in high visibility areas. Requests for pipe fitter and millwright support will be reviewed and performed if needed for safety or support of LEP requirements. All other work requests will be approved on a case-by-case basis. Systems and equipment that are not safety or security related, do not directly support the LEP workload, or require regulatory driven periodic testing and inspection, will be reviewed on a case-by-case basis consistent with the Responsive Infrastructure Model document. Pipe fitters and electricians will continue to provide 24/7 coverage.

After 2012, maintenance of the plant security systems will continue as required. The plant two-way radio system will be removed from service and an “unsecured” commercial system will be used for any personnel remaining in the plant.

The maintenance of the high voltage electrical system, plant life safety, and emergency systems and equipment will be supported as required only for remaining operations. Systems will be removed from service when possible. The plant flood control systems will not be supported by the KCP if this site is not selected for the new facility. It will instead be turned over to GSA.

While the KCP itself will not be responsible for any maintenance on the current facility beyond 2013, it is anticipated that NNSA will continue to have this responsibility during property disposition. Funding for this will have to be identified for the NNSA to transition the existing facility to another use and support the continued stewardship of those assets.

These maintenance plans are predicated on the assumptions found in Section 2.0 and the ongoing disposition planning found in Section 4.2.5 and will be revised as necessary to

accommodate the outcome of the GSA lease agreement for the new facility and sale or transfer of the existing facility.

#### **4.5 Security / Security Infrastructure**

The KCP Security program utilizes a graded approach, which offers a system that meets customer needs in a cost effective and efficient manner. The program is subdivided into Physical Security and Cyber Security. The physical security responsibilities are program management, personnel security, information security, protective force, and security systems. Program management is responsible for asset identification, threat assessments, risk assessments, security plans, performance assurance and evaluation, communications, resources, incident investigations, facility clearances, and self assessments. Personnel Security provides access authorizations, security education and awareness, human reliability, foreign visits and assignments, and oversight of official and unofficial foreign travel. Information Security provides classification, classified matter protection and control, classified vendor security, and technical surveillance countermeasures. Protective Force handles around-the-clock protection utilizing armed and unarmed personnel. Security Systems handles physical barriers, lighting systems, electronic surveillance systems, intrusion detection systems, access control systems, secure storage, and locks and keys. Cyber Security responsibilities are classified and unclassified computer security, protection distribution systems/CDIN, TEMPEST, and COMSEC. KO security provides similar services in New Mexico and Arkansas.

The Security budget is also split into two major funding categories, Physical Security and Cyber Security. Each of these major categories is “fenced” (i.e. funds cannot be switched between these two categories without NNSA approval). Physical Security budget areas include the following topical categories: Protective Force, Physical Security Systems, Information Security, Personnel Security, and Program Management. Cyber Security is divided into 10 separate funding categories aligned with its work breakdown structure. Placing Physical and Cyber Security in their own funding categories provides a more detailed approach to the budgeting process, thus enabling a clearly defined security program and mission.

The security budgeting process includes both short- and long-term program initiatives to maintain the security protection of the KCP. The KCP Site Security Plan documents the security planning process. The site plan and its funding requirements are coordinated with site federal security staff and approved by the federal site manager.

It is uncertain at this time whether the Physical Security program is adequately funded to manage a safe, secure facility through FY 2014, as shown in Figure 19. One operational impact is the potential loss through attrition of experienced staff and replacement costs for backfilling those positions. Another impact is the operating detail of the new facility. FY 2008 is the planning year for KCRIMS. As detailed plans are developed and issues emerge, security requirements, operating procedures, and funding needs will become clearer. Supplemental security funding may become necessary to achieve the transition. Funding level and staffing issues will continue to be addressed during periodic reviews. Carryover funding is essential. The KCSO oversight plan, the KCP Site Security Standard along with new variances, supplemental workforce, and redirected existing resources are some of the tools which will be used to minimize the funding constraints.

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(\$000)	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>FY14</u>
<b>Physical</b>	\$10,748	\$10,843	\$11,334	\$11,327	\$12,108	\$12,430	\$12,778
<b>Escalation</b>		8.84%	4.53%	-.06%	6.90%	2.66%	2.80%

**Figure 19 – Security Budget**

**Security Police and Fire Protection Association (SPFPA) Union Contract Renewal**

The contract between Honeywell FM&T and the SPFPA expires in 2010; therefore, negotiations of the new union contract are planned for FY 2010. Funding for strike contingency planning is required in FY 2010 and is currently listed as over-target.

**Cyber Security Program**

The Cyber Security program continues to focus on enhancing the existing layered security model of the unclassified network by reducing system vulnerabilities, investigating host based protection, and maintaining the centralized system logging capability. Additionally, the number of classified information systems that can produce classified removable electronic media is being reduced by increasing the utilization of diskless systems. The Cyber Security program is integrating with the Physical Security programs as is the current trend in industry for "convergence." Near term goals for the classified and unclassified Cyber Security programs are to increase the use of two-factor authentication with the intent of it becoming the standard.

**KCRIMS Security**

The KCP is working on a major transformation effort in order to significantly reduce annual operating costs and improve responsiveness to NNSA’s supply of non-nuclear components. One element of that transformation is relocating the Kansas City facility to include equipment, manufacturing capabilities, and personnel to a privately designed and built facility at a new location. The relocation of the KCP will require security personnel at two sites simultaneously. The security staff must provide security oversight of the new construction; security monitoring and assistance in the planning and transferring of equipment, information, and other property; and security for the new site. The current plan is to allocate the existing security staff in alignment with work scope between the two facilities and augment with a contingent work force, funded within the current FYNSP guidance for FY 2010 through FY 2014. Current high-level plans rely on stable FYNSP targets. Some funds within the target levels have been identified to fund KCRIMS risk mitigations.

Security is being integrated into key KCRIMS business decisions and assessments. Security is a key player in the transformation specifically in four areas: new building construction, new building security, property transfers, and continued security at the current location.

- New Building Construction: During construction of the new building, security oversight is needed to satisfy TSCM (technical surveillance countermeasure) concerns and to performance test the operational and assurance aspects of new security systems including the electronic surveillance system, intrusion detection system, access control system, lighting system, building operations center, and the large vehicle checkpoint guard station.

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- New Building Security: The new facility will be designed and operated in accordance with the KCP Site Security Standard. This standard allows KCP to transform to a state of commercial-like security operations with minimal compartmentalization.

The security organization transition is primarily enabled by utilizing building design coupled with the deployment of security monitoring and sensing technologies. This concept reduces the reliance on labor without degradation of security status. The replacement of compartmentalized work areas with an open shop floor concept for manufacturing also reduces security support and response cost drivers.

Specific operational challenges will include the securing of classified production while other equipment is being installed in the same manufacturing area by numerous uncleared subcontractors.

- Property Transfers: Security participates on the teams responsible for the planning and execution of the movement of both classified and unclassified equipment, materials, products, and information from the current site to the new site. Accountability and control of classified matter is critical. During the equipment dismantlement and relocation, it is likely that numerous uncleared subcontractors will be utilized. Moreover, the relocation of manufacturing production or measuring equipment will most likely necessitate the involvement of personnel from the equipments' parent companies located outside of the U.S. Screening foreign nationals from continued classified operations during the dismantlement and reinstallation of surrounding equipment in the area will be a significant challenge for security and operations. Another challenge will be the secure movement of equipment containing classified cyber systems without unloading the operating systems or internal memory for the move.
- Continued Security at Current Location: The current KCP site is expected to remain in operation through FY 2012 to support the stockpile life extension program in the completion of the retrofit units. From FY 2012 through FY 2013, security presence will be necessary to provide minimal property protection and support emergency maintenance activities. When the NNSA facility ownership has been terminated, security support will no longer be required.

### **Kirtland Operations (KO)**

In FY 2011, Kirtland Operations activities located in Albuquerque will be consolidated in the ATTC with NA-15 Office of Secure Transportation (OST), segments of NA-10 Defense Programs, and NA-42 Office of Emergency Response. The ATTC facility will be approximately 285,000 rentable square feet (RSF) on 40 acres of land. KO will occupy approximately 180,000 RSF of the facility. OST will have primary responsibility for the site and for the site's physical security with each entity maintaining their own security plan for the protection of their assets. KO is being considered for providing some of the other common site support services, including providing identification badging for all occupants at the ATTC since KO will possess that capability for its employees. Shipping and Receiving to include maintaining the warehouse, which is currently provided by the Albuquerque Service Center, is being considered for transfer to KO. The Craddock and Air Park leased properties and the permitted NC-135 site on the KAFB will be vacated with the exception of the area containing buildings 133, 134, 135, 136 and

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P1 at the NC-135 Site, which will require maintaining contract security to control access into the facility. This would be funded by NA-40.

### **Security Infrastructure**

No security infrastructure requirements are identified because of the planned relocation to the new facility currently scheduled to begin in 2010.

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## **5.0 Overview of Site Project Prioritization and Cost Profile**

### **5.1 Site Project Prioritization**

Projects may be identified by any organization and are submitted to the Finance division as part of the annual construction budget call. A preliminary scope of work and budget quality cost estimate is prepared by Facility Management Services. When all projects have been estimated, the Finance division, working in conjunction with Facility Management Services, Program Management, the President, Vice President and the Leadership team as well as the KCSO, integrate the programmatic needs with site facilities and infrastructure requirements, establish priorities, and formulate a budget. The budget formulation process addresses both short and long-range needs and incorporates the annual prioritization guidance provided in the NNSA budget call. The budget includes the identification of projects that fit within plant funding targets and requirements over target. Activities identified as requirements over target are reviewed with the Controller, the President, Vice President and the Leadership team including Program Management. These requirements are then prioritized for the plant, and presented as a budget schedule in the operating budget submission. The result of this process is the annual budget submission for construction line items, general plant projects, and other infrastructure projects. These projects are recorded in the NNSA Facilities and Infrastructure Cost Projections Attachment A tables.

### **5.2 Facilities and Infrastructure Cost Projections**

The TYSP Attachment A, NNSA Facilities and Infrastructure Cost Projections lists all Line Item, FIRP, and GPP projects that are in the KCP ten-year planning horizon. Beginning in the FY 2008 TYSP, based on KCP Transformation planning and the KCRIMS project, projects not required to support LEP completion or maintain critical infrastructure elements, have been deferred or postponed indefinitely per the Pause Plan. This has significantly affected the project tables. Paused projects, identified on Attachment A in the FY 2008 TYSP and newly paused projects have not been included in the FY 2009 TYSP Attachment A tables and have been taken out of the budget forecast. With implementation of the KCRIMS program, requirements driving these projects will be eliminated.

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## **6.0 Changes from Prior Year TYSP**

### **KCRIMS Facility**

The KCRIMS facility was shown as a proposed line item in the FY 2008 TYSP, Attachment A-2 and proposed line item construction project information sheet. At this time, CD-0 and CD-1 approvals have been received and the prospectus for the new facility has been approved by the Office of Management and Budget (OMB) and both houses of Congress. The KCRIMS selected alternative that best meets the mission need and project objectives is the construction of a new facility in the Kansas City Metro area utilizing a GSA Lease process. These decisions and approvals have been reflected throughout the narrative and attachments of this FY 2009 TYSP.

**Attachment A: Facilities and Infrastructure Cost Projections**

- A-1: Line Item Cost Projections
- A-3: RTBF/Operations of Facilities Cost Projections
- A-4(a): Facilities and Infrastructure Recapitalization Program (FIRP) Cost Projections
- A-4(b): Other Facilities and Infrastructure Recapitalization Program (FIRP) Projects
- A-5: Other Facilities and Infrastructure Cost Projections
- A-6(a): Currently Funded Security Infrastructure Projects
- A-6(b): Security Infrastructure Projects

Attachment A-1  
 Facilities and Infrastructure Cost Projection Spreadsheet  
 Line Item Projects for KCP Site  
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Priority (1)	Project Name (2)	Project Number (3)	Deferred Maintenance Identifier(s) (3a)	Mission Dependency (4)	Mission Dependency Program (4a)	Deferred Maintenance Reduction (5)	GSF Added or Eliminated (6)	Funding Type (7)	Total (8)	Prior Years Funding (9)	FY 2007 (10)	FY 2008 (11)	FY 2009 FYNP (12)	FY 2010 FYNP (13)	FY 2011 FYNP (14)	FY 2012 FYNP (15)	FY 2013 FYNP (16)	FY 2014 (17)	FY 2015 (18)	FY 2016 (19)	FY 2017 (20)	FY 2018 (21)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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NOTE: Due to KCRIMS, all previously identified projects have been suspended.



**Attachment A-4(a)**  
**NNSA Facilities and Infrastructure Cost Projection Spreadsheet**  
**Facilities and Infrastructure Recapitalization Program (FIRP) for KCP Site**  
**(\$000s)**

**FINAL**

FIRRS Priority (1)	Project Name (2)	FIRRS Score (2a)	Project Number (3)	Deferred Maintenance Identifier (3a)	Mission Dependency (4)	Mission Dependency Program (4a)	FY03 Baseline Deferred Maintenance Reduction (5)	GSF Added or Eliminated (6)	Funding Type (7)	Total (8)	Prior Years' Funding (9)	FY 2007 (10)	FY 2008 FYNSP (11)	FY 2009 FYNSP (12)	FY 2010 FYNSP (13)	FY 2011 FYNSP (14)	FY 2012 FYNSP (15)	FY 2013 FYNSP (16)
1	Replace Fire Alarm (MUX) - Pending Closeout	65	KC-R-06-01	KC-DM-B-003	MD	DSW	4,650	-	GPP	4400	4400							
2	NA-52 Program Detail		KC-R-07-02		NMD	DSW	-	-	E	83		83						
3	Replace HVAC Bldg 15- Pending Closeout	55	KC-R-06-04	KC-DM-B-015	MD	DSW	2,250	-	GPP	2486	1250	1236						
4	NWC Integrated Roofing Site Support - FY07	50	KC-R-07-01	KC-DM-G-103	MD	DSW	-	-	E	600		600						
5	NWC Integrated Roofing Site Support - FY08	50	KC-R-08-01	KC-DM-G-106	MD	DSW	-	-	E	600			600					
6	NWC Integrated Roofing Site Support - Future Years	50		KC-DM-G-106	MD	DSW	-	-	E	3000				600	600	600	600	600
N/A	Roof Asset Management Program - Recap	55	KC-R-04-04	KC-DM-B-004	MD	DSW			E	114038	33288	15900	14850	10000	10000	10000	10000	10000
<b>TOTAL (FIRP)</b>											38938	17819	15450	10600	10600	10600	10600	10600

Due to KCRIMS, all other previously identified projects have been suspended.

Attachment A-4(b)  
**NNSA Facilities and Infrastructure Cost Projection Spreadsheet**  
**Other Facilities and Infrastructure Recapitalization Program (FIRP) Projects for KCP Site**  
(\$000s)

FINAL

FIRRS Priority (1)	Project Name (2)	FIRRS Score (2a)	Project Number (3)	Deferred Maintenance Identifier(s) (3a)	Mission Dependency (4)	Mission Dependency Program (4a)	FY04 Identified Deferred Maintenance Reduction (5)	GSF Added or Eliminated (6)	Funding Type (7)	Total (8)	FY 2008 (11)	FY 2009 (12)	FY 2010 (13)	FY 2011 (14)	FY 2012 (15)	FY 2013 (16)
1																
2																
3																
4																
ETC.																
<b>TOTAL</b>										-	-	-	-	-	-	-

**Attachment A-5  
Other Facilities and Infrastructure Cost Projection Spreadsheet  
For KCP Site  
(\$000s)**

**FINAL**

Priority (1)	Project Name (2)	Project Number (3)	Mission Dependency (4)	Mission Dependency Program (4a)	Deferred Maintenance Reduction (5)	GSF Added or Eliminated (6)	Funding Type (7)	Total (8)	Prior Years' Funding (9)	FY 2007 (10)	FY 2008 (11)	FY 2009 FYNP (12)	FY 2010 FYNP (13)	FY 2011 FYNP (14)	FY 2012 FYNP (15)	FY 2013 FYNP (16)	FY 2014 (17)	FY 2015 (18)	FY 2016 (19)	FY 2017 (20)	FY 2018 (21)	
<b>NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program A)</b>																						
1	Outfalls 004,002,001 Multiple Improvements		MD	DSW			E	20350		350					10000	10000						
2																						
3																						
4																						
5																						
ETC.																						
<b>TOTAL</b>																						
<b>Program A (facilities &amp; infrastructure reported under this category)</b>								20,350	-	350	-	-	-	-	-	10,000	10,000	-	-	-	-	-
<b>Non-NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program B)</b>																						
1																						
2																						
3																						
4																						
5																						
ETC.																						
<b>TOTAL</b>																						
<b>Program B (facilities &amp; infrastructure reported under this category)</b>								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Non-NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program C)</b>																						
1																						
2																						
3																						
4																						
5																						
ETC.																						
<b>TOTAL</b>																						
<b>Program C (facilities &amp; infrastructure reported under this category)</b>								-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Non-NNSA Facilities and Infrastructure Cost Projection Spreadsheet (Program D)</b>																						
1																						
2																						
3																						
4																						
5																						
ETC.																						
<b>TOTAL</b>																						
<b>Program D (facilities &amp; infrastructure reported under this category)</b>								-	-	-	-	-	-	-	-	-	-	-	-	-		

Note: The "Outfalls 004, 002, 001 Multiple Improvements" project is not currently budgeted and there is no current driver. It is being included in this attachment to provide visibility in the event additional actions become required. If that occurs, funding will initially be requested through NA-56.

**Attachment A-6(a) - FY 2008 -- FY 2010**  
**NNSA Facilities and Infrastructure Cost Projection Spreadsheet**  
**Currently Funded Security Infrastructure Projects for KCP Site**  
**(\$000s)**

FINAL

Priority (1)	Project Name (2)	Site Specific Project Number (3)	Mission Dependency (4)	Mission Dependency Program (4a)	Estimated Total Project Cost (8)	Planned Funding Source				
						Line Item A-1,2	RTBF A-3	FIRP A-4	Other A-5	DBT Related? Y or N
	List FY 08 Projects									
	List FY 09 Projects									
	List FY10 Projects									

Note: Prioritize for each Fiscal Year (FY08, FY09 and FY10) in sequential order site Security Infrastructure projects/activities.



**Attachment A-6(b) - FY09 and FY10 Unfunded  
 NNSA Facilities and Infrastructure Cost Projection Spreadsheet  
 Security Infrastructure Projects for KCP Site  
 (\$000s)**

FINAL

Priority (1)	Prioritization Score (2a)	Project Name (2)	Site Specific Project Number (3)	Mission Dependency (4)	Mission Dependency Program (4a)	Total (8)	Proposed for either FY09 or FY10 funding	DBT Related? Y or N
<b>TOTAL</b>								

FINAL

**Attachment B: NNSA Potential Facilities and Infrastructure Impacts of Future  
Nuclear Weapons Complex Planning**



FINAL

**Attachment C: DOE New Building and Major Renovation Projects Seeking or Registered for Leadership in Energy and Environmental Design (LEED) Certification**

**Attachment C**

**FINAL**

**DOE New Building and Major Renovation Projects Seeking or Registered for Leadership in Energy and Environmental Design (LEED) Certification**

Program (1)	Site (2)	Project Title (3)	USGBC or Equivalent Project ID (4)	FIMS Property ID Critical Decision 4 and Higher (5)	FIMS Property Description Critical Decision 4 and Higher (6)	LEED or Equivalent Rating System (7)	Critical Decision Level (8)	Gross SqFt (9)	Building Construction Cost (10)	USGBC or Equivalent Registration Date (11)	Estimated Occupancy Date (12)	Planned LEED or Equivalent Certification Level (13)	LEED or Equivalent Certification Level Met and Date (14)	Notes (15)
NNSA	TBD	KCRIMS (KCP)	633428840112827	TBD	TBD	LEED NC	CD-1	TBD	Lease	07-Dec-07	01-Jan-11	Gold	TBD	GSA Lease
NNSA	TBD	KCRIMS (NSMC)	633428840112827	TBD	TBD	LEED NC	CD-1	TBD	Lease	07-Dec-07	01-Jan-11	Gold	TBD	GSA Lease

FINAL

**Attachment D: Establishment of Security Baseline**

**Attachment D: Establishment of Security Baseline for KCP Site**

**FINAL**

Facility/System Type (1)	Number of Security Areas (2)	Gross Square Feet of Security Areas (3)	Acres (4)	Linear Feet (5)
(1) PIDAS Protected Area	0	N/A		
(2) Other Protected Areas (excluding PIDAS Protected Area)	0		N/A	N/A
(3) Limited Areas	1	1,179,953	N/A	N/A
(4) Exclusion Areas	1	1,393,364	N/A	N/A
(5) Material Access Areas	0		N/A	N/A
(6) Vital Areas	0		N/A	N/A
(7) Functionally Specialized Security Areas (i.e., SCIF, classified computer facilities, secure communication facilities)	0		N/A	N/A
(8) Vault Type Rooms	0		N/A	N/A

**Attachment E (KCP): Facilities Disposition, New Construction, Leased Space,  
and Footprint Tracking Summary**

**Kansas City Plant (KCP)**

E-1 (KCP): Facilities Disposition Plan (Within FYNSP / Outyear Planning Targets)

E-1a (KCP): Facilities Disposition Plan (Above FYNSP / Funding is “TBD”)

E-2 (KCP): New Construction Footprint Added

E-3 (KCP): FY 2008 Leased Space

E-4(a) (KCP): Footprint Tracking Summary – NNSA

E-4(b) (KCP): Footprint Tracking Summary – Site Wide (Multi-Program) Not Applicable



**Attachment E-1 - NOT APPLICABLE**  
**Kansas City Plant Facilities Disposition Plan**  
**(Within FYNSP/Outyear Planning Targets)**

**FINAL**

Funding Source (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Priority Score (5)	Priority Rank (6)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition (\$000s) (10)	Yearly S&M Costs (\$000s) (11)	Contaminated (Yes or No) (13)	Notes (14)
<b>Total</b>						0			0	0		

**Attachment E-1a**  
**Kansas City Plant Facilities Disposition Plan**  
**(Above FYNSP/Funding is "TBD")**

**FINAL**

HQ Program Office (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition (\$000s) (10)	Yearly S&M Costs (\$000s) (11)	Candidate for Transfer (12)	Contaminated (Yes or No) (13)	Notes (14)
KCSO	01	Manufacturing Bldg	DSW	1,755,593	2013	2015	TBD	TBD	TBD	Yes	
KCSO	01-B	Receiving Dock	DSW	3,650	2002	2015	TBD	TBD	TBD	No	
KCSO	01-C	Main (West) Switchgear *	DSW	2,400	2013	2015	TBD	TBD	TBD	No	
KCSO	02	Main Office Building	DSW	240,717	2013	2015	TBD	TBD	TBD	No	
KCSO	05	West Boiler House *	DSW	60,760	2013	2015	TBD	TBD	TBD	No	
KCSO	09	East Employee Entrance	DSW	1,884	2013	2015	TBD	TBD	TBD	No	
KCSO	13	Manufacturing Support Bldg	DSW	142,516	2013	2015	TBD	TBD	TBD	Yes	
KCSO	14	Four Experimental Test Cells	DSW	40,077	2013	2015	TBD	TBD	TBD	Yes	
KCSO	15	Polymer Building	DSW	18,991	2013	2015	TBD	TBD	TBD	Yes	
KCSO	16	Kinematics	DSW	5,331	2013	2015	TBD	TBD	TBD	Yes	
KCSO	31	Air Monitoring Building	DSW	208	1999	2015	TBD	TBD	TBD	No	
KCSO	32	Central Guard Post	DSW	1,043	2013	2015	TBD	TBD	TBD	No	
KCSO	46	Unfinished Test Cell	DSW	5,509	2013	2015	TBD	TBD	TBD	No	
KCSO	47	North Employee Entrance	DSW	1,747	2013	2015	TBD	TBD	TBD	No	
KCSO	48	East Power House *	DSW	12,958	2013	2015	TBD	TBD	TBD	No	
KCSO	54	High Power Lab	DSW	31,309	2013	2015	TBD	TBD	TBD	Yes	
KCSO	59	Waste Management Building	DSW	24,120	2013	2015	TBD	TBD	TBD	Yes	
KCSO	68	Storage Shed	DSW	576	2013	2015	TBD	TBD	TBD	No	
KCSO	73	Solid Waste Disposal	DSW	8,868	2013	2015	TBD	TBD	TBD	No	
KCSO	74	Production Storage	DSW	27,294	2013	2015	TBD	TBD	TBD	No	
KCSO	75	Security Supv Control	DSW	2,294	2013	2015	TBD	TBD	TBD	No	
KCSO	76	Explosive Storage Bunker	DSW	150	2013	2015	TBD	TBD	TBD	No	
KCSO	77	Oil Storage	DSW	2,319	2013	2015	TBD	TBD	TBD	Yes	
KCSO	78	East Guard Post	DSW	413	2013	2015	TBD	TBD	TBD	No	
KCSO	79	West Guard Post	DSW	200	2013	2015	TBD	TBD	TBD	No	
KCSO	80	North Guard Post	DSW	454	2013	2015	TBD	TBD	TBD	No	
KCSO	86	North Wing Lab	DSW	28,624	2013	2015	TBD	TBD	TBD	Yes	
KCSO	87	Test Cells	DSW	132,596	2013	2015	TBD	TBD	TBD	Yes	
KCSO	88	Forge & Casting	DSW	35,960	2013	2015	TBD	TBD	TBD	Yes	
KCSO	89	Fire Protection Pump House	DSW	1,904	2013	2015	TBD	TBD	TBD	No	

**Attachment E-1a**  
**Kansas City Plant Facilities Disposition Plan**  
**(Above FYNSP/Funding is "TBD")**

**FINAL**

HQ Program Office (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition (\$000s) (10)	Yearly S&M Costs (\$000s) (11)	Candidate for Transfer (12)	Contaminated (Yes or No) (13)	Notes (14)
KCSO	90	Mold Heating & Cooling	DSW	2,400	2013	2015	TBD	TBD	TBD	Yes	
KCSO	91	Plating Building	DSW	38,113	2013	2015	TBD	TBD	TBD	Yes	
KCSO	92	Building 92	OTHER	258,229	2013	2015	TBD	TBD	TBD	No	
KCSO	93	Northeast Guard Post	DSW	191	2013	2015	TBD	TBD	TBD	No	
KCSO	94	Northwest Guard Post	DSW	240	2002	2015	TBD	TBD	TBD	No	
KCSO	96	Special Process Building	DSW	13,585	2013	2015	TBD	TBD	TBD	Yes	
KCSO	98	Ind Wastewater Pretreatment	DSW	21,988	2013	2015	TBD	TBD	TBD	Yes	
KCSO	99	Rec./Shipping Security Post	DSW	305	2013	2015	TBD	TBD	TBD	No	
<b>Total</b>				<b>2,925,516</b>							

**Notes:**

1. The buildings listed above are part of the Bannister Federal Complex (BFC) and Disposition will be a joint effort between NNSA and GSA.
2. In column (3), Facility Name, an \* indicates NNSA buildings that support the BFC and whose disposition may be later than the disposition date of the other NNSA buildings.
3. Gross Square Footage in column (7) has been modified per AFDCS guidelines and definitions.
4. RTBF funds to cover maintenance and surveillance (column 11) estimated at \$7 million annually would be required, beginning at the end of FY2013, to maintain the NNSA owned property in the BFC in a safe and marketable condition until sale of the property.



**Attachment E-3  
FY 2008 Leased Space  
Kansas City Plant Site**

**FINAL**

#	FIMS # (2)	Property Name (3)	Mission Dependency Program (4)	Mission Dependency (5)	# Occupants (6)	Gross Square Feet (7)	Rental Rate per Rentable s.f. (8)	Annual Cost (9)	Lease Type (10)	Lease Term - yrs. (11)	Exp. Month / Year (12)	Renewal Options (13)
1	MO0017731	Fed. Bldg. No. 1	DSW	MC	34	231,233	0.33	\$75,936	none	None	10/1/2012	Y
2	R50 Office	HTSI Office	OTHER	NMD	1	186	37.41	\$6,960	full	1	Jan-09	2

**Attachment E-4(a)**  
**FOOTPRINT TRACKING SUMMARY SPREADSHEET**  
**Kansas City Plant Site Footprint Tracking Summary - NNSA**

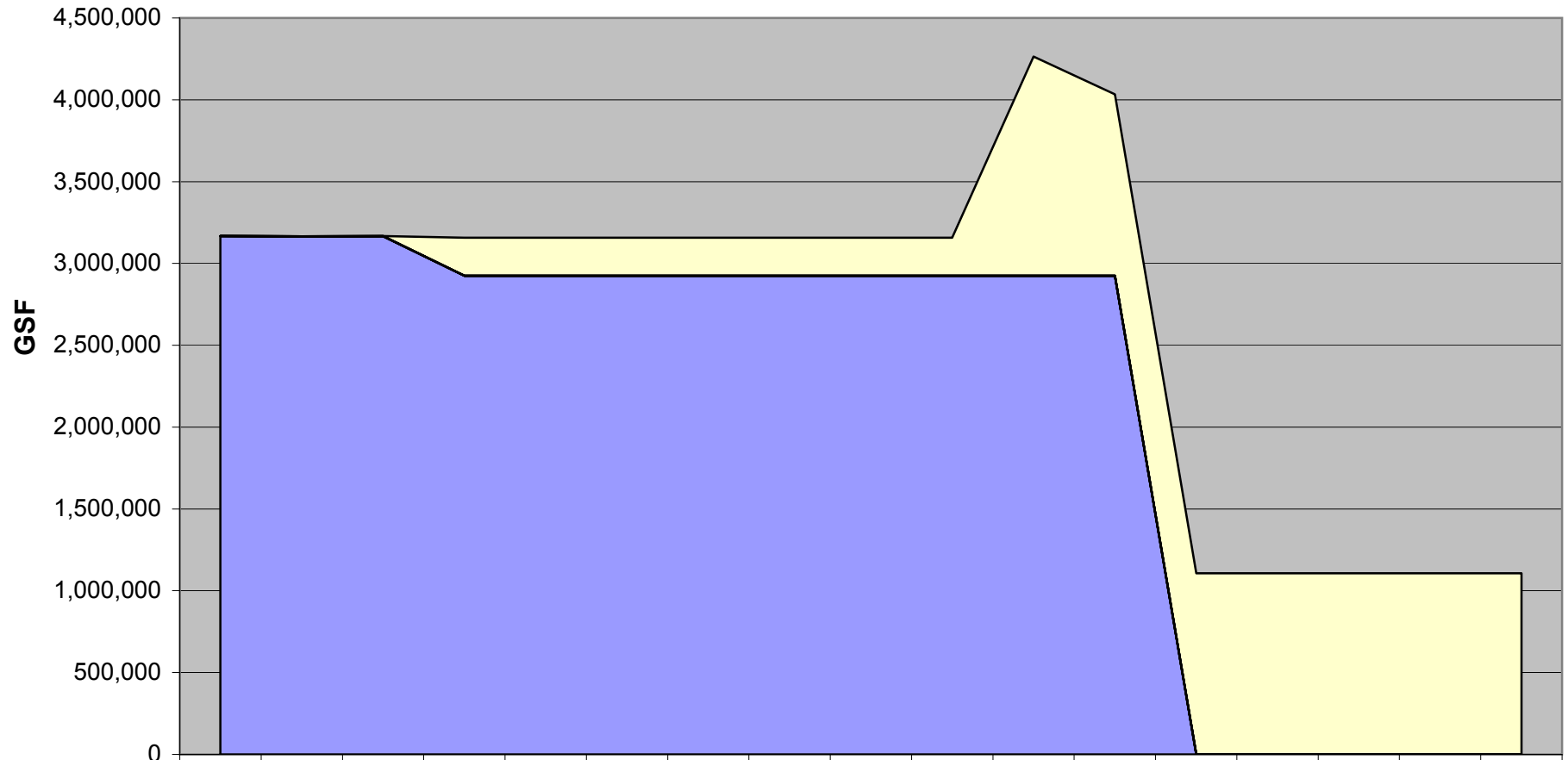
**FINAL**

Fiscal Year (1)	Beginning Site Footprint (gsf) (2)	Excess Facilities Footprint Elimination (gsf) (3)	New Construction/ Footprint Added (gsf) (4)	Site Footprint Reduction by FY (gsf) (5)	Footprint "Banked" (gsf) (6)	Waiver/ Transfer (gsf) (7)	"Grandfathered" Footprint Added (gsf) (8)	Cumulative "Grandfathered" Footprint Added (gsf) (8a)	NNSA Site Total Footprint (gsf) (9)	NNSA Leased Space (10)	Weapons Activities Account (gsf) (11)
FY 2002 Actual	3,166,813	-369	0	3,166,444	0		0	0	3,166,444	0	N/A
FY 2003 Actual	3,166,444	-208	0	3,166,236	0		0	0	3,166,236	0	NA
FY 2004 Actual	3,166,236	0	0	3,166,236	0		305	305	3,166,541	0	N/A
FY 2005 Actual*	2,925,516	0	0	2,925,516	0		0	0	2,925,516	231,392	N/A
FY 2006 Actual*	2,925,516	0	0	2,925,516	0		0	0	2,925,516	231,392	0
FY 2007	2,925,516	0	0	2,925,516	0		0	0	2,925,516	231,419	0
FY 2008	2,925,516	0	0	2,925,516	0		0	0	2,925,516	231,419	0
FY 2009	2,925,516	0	0	2,925,516	0		0	0	2,925,516	231,419	0
FY 2010	2,925,516	0	0	2,925,516	0		0	0	2,925,516	231,233	0
FY 2011	2,925,516	0	0	2,925,516	0		0	0	2,925,516	231,233	0
FY 2012	2,925,516	0	0	2,925,516	0		0	0	2,925,516	1,338,683	0
FY 2013	2,925,516	-2,925,516	0	0	0		0	0	0	1,107,450	0
FY 2014	0	0	0	0	0		0	0	0	1,107,450	0
FY 2015	0	0	0	0	0		0	0	0	1,107,450	0
FY 2016	0	0	0	0	0		0	0	0	1,107,450	0
FY 2017	0	0	0	0	0		0	0	0	1,107,450	0
FY 2018	0	0	0	0	0		0	0	0	1,107,450	0

**NOTES:**

1. Facilities proposed for disposition are identified on Attachment E-1a only pending NNSA Headquarters review of KCP disposition scope and estimated costs during FY2008.
2. In FY2012, KCP will have acquired by lease, through GSA, a new operations facility by the KCRIMS program. Existing GSA Assigned space will be relinquished and the new gsf (at approximately 1,107,450) will exist.
3. FY2005 and FY2006 figures (marked by an \*) in the column titled "Beginning Site Footprint" had included "Leased and/or GSA Assigned Space" in all past TYSPs; however, now that figure represents only NNSA owned gsf.

**ATTACHMENT E-4(a)  
Kansas City Plant Site Space Tracking Summary - NNSA**



	FY 2002 Actual	FY 2003 Actual	FY 2004 Actual	FY 2005 Actual*	FY 2006 Actual*	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
■ NNSA Leased Space (10)	0	0	0	231,392	231,392	231,419	231,419	231,419	231,233	231,233	1,338,683	1,107,450	1,107,450	1,107,450	1,107,450	1,107,450	1,107,450
■ Cumulative "Grandfathered" Footprint Added (gsf) (8a)	0	0	305	0	0	0	0	0	0	0	0	0	0	0	0	0	0
■ Beginning Site Footprint (gsf) (2)	3,166,813	3,166,444	3,166,236	2,925,516	2,925,516	2,925,516	2,925,516	2,925,516	2,925,516	2,925,516	2,925,516	2,925,516	0	0	0	0	0

**Attachment E-4 (b)**  
**FOOTPRINT SUMMARY SPREADSHEET**  
**Kansas City Plant Footprint Tracking Summary - SITE WIDE (Multi-Program)**

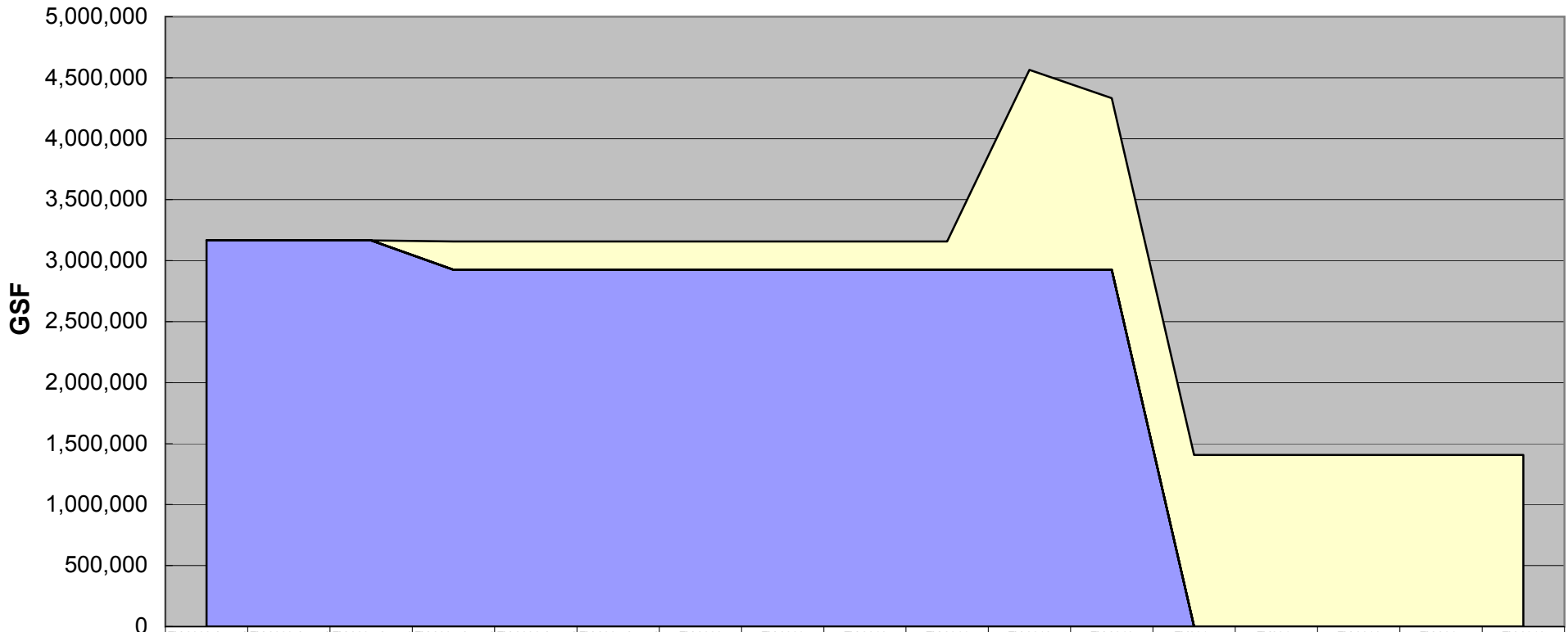
FINAL

Fiscal Year (1)	Beginning Site Footprint (gsf) (2)	Excess Facilities Footprint Elimination (gsf) (3)	New Construction Footprint Added (gsf) (4)	Site Footprint Reduction by FY (5)	Footprint "Banked" (gsf) (6)	Waiver/Transfer (gsf) (7)	"Grandfathered" Footprint Added (gsf) (8)	Cumulative Grandfathered Footprint Added (gsf) (8a)	Site Total Footprint (Multi-Program) (gsf) (9)	Leased Space (10)
FY 2002 Actual	3,166,813	-369	0	3,166,444	0		0	0	3,166,444	0
FY 2003 Actual	3,166,444	-208	0	3,166,236	0		0	0	3,166,236	0
FY 2004 Actual	3,166,236	0	0	3,166,236	0		305	305	3,166,541	0
FY 2005 Actual	2,925,516	0	0	2,925,516	0		0	0	2,925,516	231,392
FY 2006 Actual	2,925,516	0	0	2,925,516	0		0	0	2,925,516	231,392
FY 2007 Actual	2,925,516	0	0	2,925,516	0		0	0	2,925,516	231,419
FY 2008	2,925,516	0	0	2,925,516	0		0	0	2,925,516	231,419
FY 2009	2,925,516	0	0	2,925,516	0		0	0	2,925,516	231,419
FY 2010	2,925,516	0	0	2,925,516	0		0	0	2,925,516	231,233
FY 2011	2,925,516	0	0	2,925,516	0		0	0	2,925,516	231,233
FY 2012	2,925,516	0	0	2,925,516	0		0	0	2,925,516	1,638,833
FY 2013	2,925,516	-2,925,516	0	0	0		0	0	0	1,407,600
FY2014	0	0	0	0	0		0	0	0	1,407,600
FY2015	0	0	0	0	0		0	0	0	1,407,600
FY 2016	0	0	0	0	0		0	0	0	1,407,600
FY 2017	0	0	0	0	0		0	0	0	1,407,600
FY 2018	0	0	0	0	0		0	0	0	1,407,600

**NOTES:**  
1. Attachment E-4b differs from E-4a with the inclusion of the NSMC building of 300,150 gsf leased space supporting WFO beginning in FY2012.



**ATTACHMENT E-4(b)**  
**Kansas City Plant Site Wide Footprint Tracking Summary - SITE WIDE (Multi-Program)**



	FY 2002 Actual	FY 2003 Actual	FY 2004 Actual	FY 2005 Actual	FY 2006 Actual	FY 2007 Actual	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
■ Leased Space (10)	0	0	0	231,392	231,392	231,419	231,419	231,419	231,233	231,233	1,638,833	1,407,600	1,407,600	1,407,600	1,407,600	1,407,600	1,407,600
■ Cumulative Grandfathered Footprint Added (gsf) (8a)	0	0	305	0	0	0	0	0	0	0	0	0	0	0	0	0	0
■ Beginning Site Footprint (gsf) (2)	3,166,813	3,166,444	3,166,236	2,925,516	2,925,516	2,925,516	2,925,516	2,925,516	2,925,516	2,925,516	2,925,516	2,925,516	0	0	0	0	0

**Attachment E (KO): Facilities Disposition, New Construction, Leased Space, and Footprint Tracking Summary**

**Kirtland Operations (KO)**

E-1 (KO): Facilities Disposition Plan (Within FYNSP / Outyear Planning Targets)

E-1a (KO): Facilities Disposition Plan (Above FYNSP / Funding is “TBD”)

E-2 (KO): New Construction Footprint Added

E-3 (KO): FY 2008 Leased Space

E-4(a) (KO): Footprint Tracking Summary – NNSA

E-4(b) (KO): Footprint Tracking Summary – Site Wide (Multi-Program) Not Applicable

**Attachment E-1**  
**Kirtland Operations Facilities Disposition Plan - NOT APPLICABLE**  
**(Within FYNSP/Outyear Planning Targets)**

**FINAL**

Funding Source (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Priority Score (5)	Priority Rank (6)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition (\$000s) (10)	Yearly S&M Costs (\$000s) (11)	Contaminated (Yes or No) (13)	Notes (14)
<b>Total</b>						0			0	0		

**Attachment E-1a  
Kirtland Operations Facilities Disposition Plan  
(Above FYNSP/Funding is "TBD")**

**FINAL**

HQ Program Office (1)	Facility Identification Number (FIMS) (2)	Facility Name (3)	Mission Dependency Program (4)	Gross Square Footage (gsf) (7)	Excess Year (8)	Estimated Disposition Year (9)	TEC to Disposition (\$000s) (10)	Yearly S&M Costs (\$000s) (11)	Candidate for Transfer (12)	Contaminated (Yes or No) (13)	Notes (14)	
KCSO	T-101	LAN/Computer Services	STA	2,580	2011	2011	TBD	TBD	TBD	No		
KCSO	T-102	Special Projects Facility 102	STA	2,287	2011	2011	TBD	TBD	TBD	No		
KCSO	T-103	Special Projects Facility 103	STA	1,680	2011	2011	TBD	TBD	TBD	No		
KCSO	T-105	Security Forces Operation	STA	4,800	2011	2011	TBD	TBD	TBD	No		
KCSO	T-106	Electronics Comm. Depot -	STA	5,000	2011	2011	TBD	TBD	TBD	No		
KCSO	T-108	Engineering	STA	2,080	2011	2011	TBD	TBD	TBD	No		
KCSO	T-109	Applied Sciences Facility	STA	2,160	2011	2011	TBD	TBD	TBD	No		
KCSO	T-110	Sciences Lab	STA	1,680	2011	2011	TBD	TBD	TBD	No		
KCSO	T-111	Facility Services	STA	2,280	2011	2011	TBD	TBD	TBD	No		
KCSO	T-112	Electronics Fabrication	STA	7,300	2011	2011	TBD	TBD	TBD	No		
KCSO	T-116	Model Shop	STA	1,400	2011	2011	TBD	TBD	TBD	No		
KCSO	T-122	Finance	STA	1,750	2011	2011	TBD	TBD	TBD	No		
KCSO	T-123	Special Projects	STA	1,680	2011	2011	TBD	TBD	TBD	No		
KCSO	T-124	Human Resources	STA	1,680	2011	2011	TBD	TBD	TBD	No		
KCSO	T-125	Communications Depot	STA	1,680	2011	2011	TBD	TBD	TBD	No		
KCSO	T-126	Conference Bldg	STA	896	2011	2011	TBD	TBD	TBD	No		
KCSO	T-127	Division Office	STA	1,680	2011	2011	TBD	TBD	TBD	No		
KCSO	T-128	Fac Srvs/Shipping & Rcvg	STA	4,400	2011	2011	TBD	TBD	TBD	No		
KCSO	T-129	Insulator Test Facility	STA	960	2011	2011	TBD	TBD	TBD	No		
KCSO	130	Security Services	STA	896	2011	2011	TBD	TBD	TBD	No		
KCSO	T-131	Entry Control Station	STA	96	2011	2011	TBD	TBD	TBD	No		
KCSO	T-132	Storage - 112102	STA	239	2011	2011	TBD	TBD	TBD	No		
<b>Total</b>				49,204								

**Note:** In February 2008, the KAFB Commander notified KO to develop a closeout plan to vacate the NC-135 Site and remove the improvements with the exception of the paint facility, buildings 135 and 136. In addition, KO has requested retention of buildings 133 and 134, plus P1. The remaining buildings listed above will become excess to the NNSA mission in FY2011 upon KO consolidation into the ATTC. A new project is being scoped to disposition the above listed buildings. For additional information, see section 4.2.5 Disposition Planning.



**Attachment E-3  
FY 2008 Leased Space  
Kirtland Operations Site**

**FINAL**

#	FIMS # (2)	Property Name (3)	Mission Dependency Program (4)	Mission Dependency (5)	# Occupants (6)	Gross Square Feet (7)	Rental Rate per Rentable s.f. (8)	Annual Cost (9)	Lease Type (10)	Lease Term - yrs. (11)	Exp. Month / Year (12)	Renewal Options (13)
1	KO-1	Craddock Building	STA	MC	31	38,260	\$6.38	\$244,101.78	Partial	1	Jan-09	Y
2	KO-2	Air Park Building	STA	MD-NC	24	10,362	\$13.79	\$142,892.04	Full	1	Aug-09	Y
3	LANL-01	Trinity Office	NWIR	MD-NC	5	2,772	\$18.13	\$50,256.36	Full	1	Jun-09	Y

**Attachment E-4(a)**  
**FOOTPRINT TRACKING SUMMARY SPREADSHEET**  
**Kirtland Operations Site Footprint Tracking Summary - NNSA**

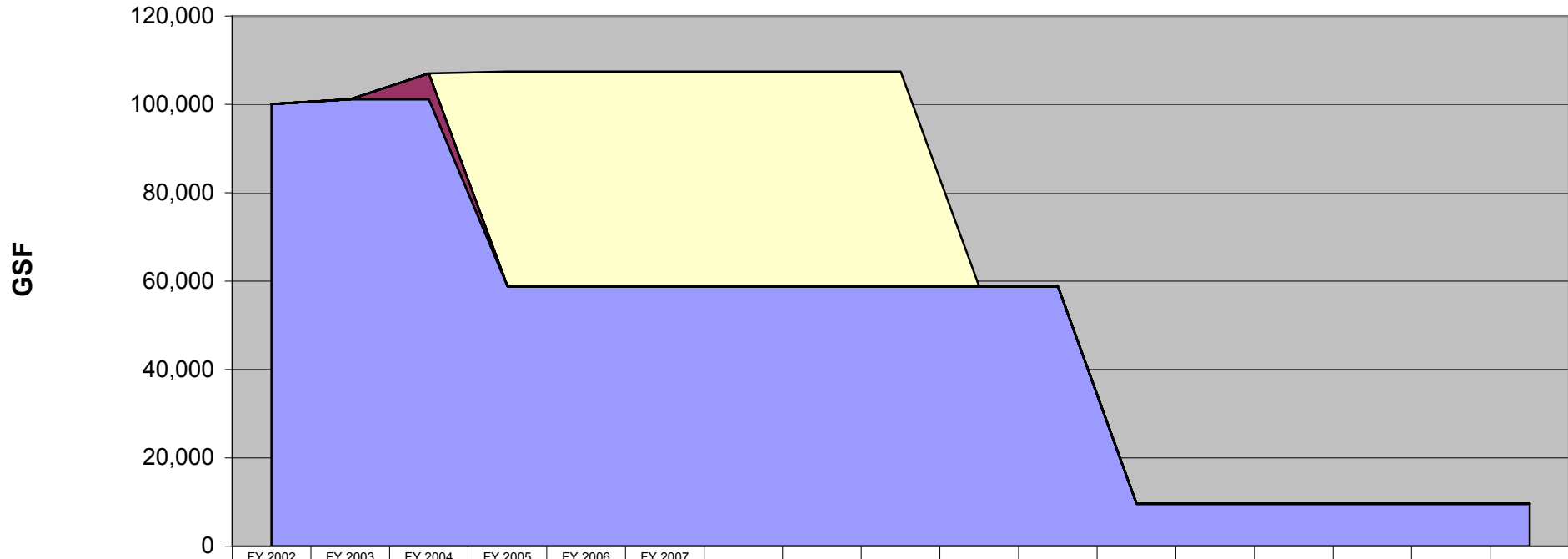
**FINAL**

Fiscal Year (1)	Beginning Site Footprint (gsf) (2)	Excess Facilities Footprint Elimination (gsf) (3)	New Construction/ Footprint Added (gsf) (4)	Site Footprint Reduction by FY (gsf) (5)	Footprint "Banked" (gsf) (6)	Waiver/ Transfer (gsf) (7)	"Grandfathered" Footprint Added (gsf) (8)	Cumulative "Grandfathered" Footprint Added (gsf) (8a)	NNSA Site Total Footprint (gsf) (9)	NNSA Leased Space (10)	Weapons Activities Account (gsf) (11)
<b>FY 2002 Actual</b>	100,041	-2,660	3,787	101,168	1,127		0	0	101,168	0	N/A
<b>FY 2003 Actual</b>	101,168	0	0	101,168	1,127		0	0	101,168	0	NA
<b>FY 2004 Actual</b>	101,168	0	0	101,168	1,127		5,838	5,838	107,006	0	N/A
<b>FY 2005 Actual</b>	58,829	0	0	58,829	1,127		0	0	58,829	48,622	N/A
<b>FY 2006 Actual</b>	58,829	0	0	58,829	1,127		0	0	58,829	48,622	0
<b>FY 2007 Actual</b>	58,829	0	0	58,829	1,127		0	0	58,829	48,622	0
<b>FY 2008</b>	58,829	0	0	58,829	1,127		0	0	58,829	48,622	0
<b>FY 2009</b>	58,829	0	0	58,829	1,127		0	0	58,829	48,622	0
<b>FY 2010</b>	58,829	0	0	58,829	1,127		0	0	58,829	48,622	0
<b>FY 2011</b>	58,829	0	0	58,829	1,127		0	0	58,829	0	0
<b>FY 2012</b>	58,829	-49,204	0	9,625	0		0	0	9,625	0	0
<b>FY 2013</b>	9,625	0	0	9,625	0		0	0	9,625	0	0
<b>FY 2014</b>	9,625	0	0	9,625	0		0	0	9,625	0	0
<b>FY 2015</b>	9,625	0	0	9,625	0		0	0	9,625	0	0
<b>FY 2016</b>	9,625	0	0	9,625	0		0	0	9,625	0	0
<b>FY 2017</b>	9,625	0	0	9,625	0		0	0	9,625	0	0
<b>FY 2018</b>	9,625	0	0	9,625	0		0	0	9,625	0	0

**NOTES:**

- In FY 2011 KO will consolidate into the NNSA Albuquerque Transportation & Technology Center (ATTC) with NNSA NA-15, Office of Secure Transportation (OST). OST will report in their TYSP the total ATTC leased space, estimated to be 285,000 rentable square feet (RSF), of which KO will occupy approximately 180,000 RSF. KO ATTC space will not be reported in the KCP TYSP. KO will vacate the Craddock and Air Park leased properties and terminate those NNSA leases. KO will vacate the NC-135 Site with the exception of buildings 133, 134, 135, and 136, plus P1. When disposition of the remaining NC-135 Site is complete, the reduction will be listed in Attachment E-4.
- Figures in the column (2) titled "Beginning Site Footprint" have included "Leased and/or GSA Assigned Space" in past TYSPs; these figures now represent only NNSA owned gsf.

**ATTACHMENT E-4(a)  
Kirtland Operations Site Space Tracking Summary - NNSA**



	FY 2002 Actual	FY 2003 Actual	FY 2004 Actual	FY 2005 Actual	FY 2006 Actual	FY 2007 Actual	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
■ NNSA Leased Space (10)	0	0	0	48,622	48,622	48,622	48,622	48,622	48,622	0	0	0	0	0	0	0	0
■ Cumulative "Grandfathered" Footprint Added (gsf) (8a)	0	0	5,838	0	0	0	0	0	0	0	0	0	0	0	0	0	0
■ Beginning Site Footprint (gsf) (2)	100,041	101,168	101,168	58,829	58,829	58,829	58,829	58,829	58,829	58,829	58,829	9,625	9,625	9,625	9,625	9,625	9,625



**Attachment E-4 (b)**  
**FOOTPRINT SUMMARY SPREADSHEET**  
**Kirtland Operations Footprint Tracking Summary - SITE WIDE (Multi-Program)**

**FINAL**

Fiscal Year (1)	Beginning Site Footprint (gsf) (2)	Excess Facilities Footprint Elimination (gsf) (3)	New Construction Footprint Added (gsf) (4)	Site Footprint Reduction by FY (5)	Footprint "Banked" (gsf) (6)	Waiver/Transfer (gsf) (7)	"Grandfathered" Footprint Added (gsf) (8)	Cumulative Grandfathered Footprint Added (gsf) (8a)	Site Total Footprint (Multi-Program) (gsf) (9)	Leased Space (10)
<b>FY 2002 Actual</b>	100,041	-2,660	3,787	101,168	1,127		0	0	101,168	0
<b>FY 2003 Actual</b>	101,168	0	0	101,168	1,127		0	0	101,168	0
<b>FY 2004 Actual</b>	101,168	0	0	101,168	1,127		5,838	5,838	107,006	0
<b>FY 2005 Actual</b>	58,829	0	0	58,829	1,127		0	0	58,829	51,394
<b>FY 2006 Actual</b>	58,829	0	0	58,829	1,127		0	0	58,829	51,394
<b>FY 2007 (Actual)</b>	58,829	0	0	58,829	1,127		0	0	58,829	51,394
<b>FY 2008</b>	58,829	0	0	58,829	1,127		0	0	58,829	51,394
<b>FY 2009</b>	58,829	0	0	58,829	1,127		0	0	58,829	51,394
<b>FY 2010</b>	58,829	0	0	58,829	1,127		0	0	58,829	51,394
<b>FY 2011</b>	58,829	0	0	58,829	1,127		0	0	58,829	2,772
<b>FY 2012</b>	58,829	-49,204	0	9,625	0		0	0	9,625	2,772
<b>FY 2013</b>	9,625	0	0	9,625	0		0	0	9,625	2,772
<b>FY 2014</b>	9,625	0	0	9,625	0		0	0	9,625	2,772
<b>FY 2015</b>	9,625	0	0	9,625	0		0	0	9,625	2,772
<b>FY 2016</b>	9,625	0	0	9,625	0		0	0	9,625	2,772
<b>FY 2017</b>	9,625	0	0	9,625	0		0	0	9,625	2,772
<b>FY 2018</b>	9,625	0	0	9,625	0		0	0	9,625	2,772

**ATTACHMENT E-4(b)**  
**Kirtland Operations Footprint Tracking Summary - SITE WIDE (Multi-Program)**



**Attachment F: Deferred Maintenance Baseline and Projected Deferred Maintenance Reduction**

F1: FIRP FY 2003 Legacy Deferred Maintenance Baseline and Projected Deferred Maintenance Reduction from Baseline

F2: NNSA Total Deferred Maintenance and Projected Deferred Maintenance Reduction

Attachment F-1

FINAL

FIRP FY2003 Legacy Deferred Maintenance Baseline and Projected Deferred Maintenance Reduction from Baseline  
 NNSA  
 (\$000s)

Category of Maintenance	FY 2003 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
1. FIRP DEFERRED MAINTENANCE (DM) BASELINE (Excludes Programmatic Real Property or Equipment)	89,505	81,974	66,218	60,819	59,469	59,469	59,469	59,469	59,469	59,469	-	-	-	-	-	-
2. DEFERRED MAINTENANCE BASELINE (DM) REDUCTION TOTAL		7,531	15,756	5,399	1,350											
A. Reduction in DM Baseline (total due to FIRP ONLY) for all F&I		7,531	15,756	5,399	1,350	-	-	-	-	-	-					
i. Reduction in DM for <u>Mission-Critical</u> F&I (due to FIRP ONLY)				5,399	1,350											
ii. Reduction in DM for <u>Mission Dependent, Not Critical</u> F&I (due to FIRP ONLY)																
iii. Reduction in DM for <u>Not Mission Dependent</u> F&I (due to FIRP ONLY)																
3. REPLACEMENT PLANT VALUE (RPV) FOR NNSA FACILITIES & INFRASTRUCTURE																

Note 1: KCRIMS Program includes relocation to new facility complete by the end of FY2012.

Attachment F-2

FINAL

NSNA Total Deferred Maintenance and Projected Deferred Maintenance Reduction  
(\$000s)

Category of Maintenance	FY 2003 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
1. ANNUAL REQUIRED MAINTENANCE for F&I	22,147	39,224	53,496	37,594	50,914	28,408	29,545	29,845	36,383	35,158	20,465	16,684	17,268	17,872	18,497	19,144
2. ANNUAL PLANNED MAINTENANCE TOTAL	21,094	27,608	33,958	31,803	30,361	28,408	29,545	29,845	36,383	35,158	20,465	16,684	17,268	17,872	18,497	19,144
a. Direct	21,094	27,608	24,646	23,345	21,253	19,886	20,681	20,891	25,468	24,611	14,326	11,679	12,088	12,510	12,948	13,401
b. Indirect			9,312	8,458	9,108	8,522	8,864	8,954	10,915	10,547	6,139	5,005	5,180	5,362	5,549	5,743
3. DEFERRED MAINTENANCE (DM) TOTAL (Excludes Programmatic Real Property or Equipment) = Inflation Prior Year DM Total + DM New - Prior Year DM Reduction	89,505	98,473	99,989	105,058	124,209	138,504	158,858	184,335	209,183	230,359	41,308	42,217	43,146	44,095	45,065	46,056
i. Backlog Inflation Rate (%)		2.3%	2.6%	2.0%	2.2%	2.6%	2.5%	2.3%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%
ii. DM Inflation		2,059	2,560	2,000	2,311	3,229	3,463	3,654	4,055	4,602	889	909	929	949	970	991
iii. DM NEW		19,091	23,288	10,951	19,629	11,066	16,891	21,823	20,793	16,574	-	-	-	-	-	-
A. DM, Mission-Critical F&I ONLY				80,460	95,356	106,348	120,451	140,917	154,336	172,333	-	-	-	-	-	-
B. DM, Mission-Dependent, Not Critical F&I ONLY				23,811	27,502	28,556	34,464	39,060	47,229	50,018	-	-	-	-	-	-
C. DM, Not Mission-Dependent F&I ONLY				1,974	2,547	2,755	3,077	3,472	6,713	7,083	41,308	42,217	43,146	44,095	45,065	46,056
4. DEFERRED MAINTENANCE (DM) REDUCTION TOTAL		12,182	24,332	7,882	2,789	-	-	-	-	-	-	-	-	-	-	-
i. Reduction Total attributed to FIRP ONLY		7,715	19,727	6,246	2,631	-	-	-	-	-	-	-	-	-	-	-
A. Reduction in DM for Mission-Critical F&I				6,695	2,780											
1. Reduction attributed to FIRP ONLY				6,135	2,622											
B. Reduction in DM for Mission-Dependent, Not Critical F&I				389	9											
1. Reduction attributed to FIRP ONLY				79	9											
C. Reduction in DM for Not Mission-Dependent F&I				798												
1. Reduction attributed to FIRP ONLY				32												
5. REPLACEMENT PLANT VALUE (RPV) for Facilities and Infrastructure (F&I) = Inflation of PY RPV + Increase or Decrease due to other causes	1,738,027	1,778,002	1,741,099	1,499,391	1,532,378	1,572,220	1,611,525	1,648,590	1,684,859	1,721,926	1,759,809	1,798,524	1,838,092	1,878,530	1,919,858	1,962,095
A. RPV for Mission-Critical F&I ONLY				1,004,097	1,026,188	1,049,789	1,073,935	1,098,635	1,123,904	1,149,753	-	-	-	-	-	-
B. RPV for Mission-Dependent, Not Critical F&I				327,104	334,300	346,587	357,702	365,930	372,697	379,585	-	-	-	-	-	-
C. RPV for Not Mission-Dependent F&I				168,190	171,890	175,844	179,888	184,025	188,258	192,588	1,759,809	1,798,524	1,838,092	1,878,530	1,919,858	1,962,095
D. RPV Increase from prior year attributed to inflation					32,987	39,842	39,305	37,065	36,269	37,067	37,882	38,716	39,568	40,438	41,328	42,237
E. RPV Increase / decrease attributed to causes other than inflation (provide separate supporting narrative behind F-2 exhibit)				(241,708)												

Facility Condition Index (FCI)	FY 2003 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
FCI TOTAL	5.1%	5.5%	5.7%	7.0%	8.1%	8.8%	9.9%	11.2%	12.4%	13.4%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%
FCI Mission Critical				8.0%	9.3%	10.1%	11.2%	12.8%	13.7%	15.0%	N/A	N/A	N/A	N/A	N/A	N/A
FCI Mission Dependent, Not Critical				7.3%	8.2%	8.2%	9.6%	10.7%	12.7%	13.2%	N/A	N/A	N/A	N/A	N/A	N/A
FCI Not Mission Dependent				1.2%	1.5%	1.6%	1.7%	1.9%	3.6%	3.7%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%
Asset Condition Index (ACI)																
ACI TOTAL	0.95	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.98	0.98	0.98	0.98	0.98	0.98
ACI Mission Critical				0.92	0.91	0.90	0.89	0.87	0.86	0.85	N/A	N/A	N/A	N/A	N/A	N/A
ACI Mission Dependent, Not Critical				0.93	0.92	0.92	0.90	0.89	0.87	0.87	N/A	N/A	N/A	N/A	N/A	N/A
ACI Not Mission Dependent				0.99	0.99	0.98	0.98	0.98	0.98	0.96	0.98	0.98	0.98	0.98	0.98	0.98

FINAL

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