NATIONAL SECURITY AGENCY
CENTRAL SECURITY SERVICE
NSA/CSS POLICY MANUAL 9-12

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Revised:

(U) NSA/CSS STORAGE DEVICE SANITIZATION MANUAL

(U) PURPOSE AND SCOPE

(U) This manual provides guidance for *sanitization* of *Information Systems (IS) storage devices* for disposal or *recycling* in accordance with NSA/CSS Policy Statement 9-12, "NSA/CSS Storage Device Sanitization." Information stored on these devices may range from UNCLASSIFIED to TOP SECRET and may include compartmented, sensitive, or limited-distribution material. Furthermore, this manual provides information on how to obtain current listings of evaluated sanitization equipment that meets NSA/CSS specifications.

(U) This manual applies to all NSA/CSS elements and pertains to all IS storage devices utilized by those elements, contractors, and personnel.

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for
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Endorsed by
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(U) This Policy Manual 9-12 supersedes NSA/CSS Policy Manual dated 13 March 2006.\

(U) OPI: LL25 Center for Storage Device Sanitization Research

(U) No section of this document shall be released without the approval from the Office of Policy and Records (DJ).

(U) TABLE OF CONTENTS

(U) PROCEDURES

1.(U) Guidance for the sanitization and release of IS storage devices not covered by this document may be obtained by submitting all pertinent information to NSA/CSS (Attention: LL25 Center for Storage Device Sanitization Research, 301-688-1053, csdsr@nsa.gov).

(U) MAGNETIC STORAGE DEVICES

2.(U) Magnetic Tapes

a. (U) Sanitization: Sanitization magnetic tapes using one of the following procedures. Remove all labels or markings that indicate previous use or classification.

1) (U) *Degaussing:* Degauss using an NSA/CSS evaluated *degausser* per Reference a.

2) (U) Incineration: Material must be reduced to ash.

b. (U) *Declassification:* Declassify magnetic tapes only after approved verification and review procedures are completed per Reference b.

c. (U) Release: Unless otherwise specified by the appropriate IS Security Officer (or equivalent), declassified magnetic tapes may be released for disposal or recycling only after sanitization procedures and a declassification review have been completed per Reference b.

3.(U) Magnetic Disks: Magnetic disks include hard disk drives and diskettes.

a. (U) Hard Disk Drives

1) (U) Sanitization: Sanitize hard disk drives using one of the following procedures. Remove all labels or markings that indicate previous use or classification.

a) (U) Automatic Degausser: Degauss using an NSA/CSS evaluated degausser per Reference a. It is highly recommended to physically damage the hard disk drive by deforming the internal platters prior to release by any means or by using a hard disk drive crusher (contact the Center for Storage Device Sanitization for this listing).

b) (U) Degaussing Wand: Sanitize hard disk drives by disassembling the device and erasing all surfaces of the enclosed platters with an NSA/CSS evaluated hand-held degaussing wand per Reference a.

It is highly recommended to physically damage the hard disk drive by deforming the internal platter prior to release by any means or by using a hard disk drive crusher (contact the Center for Storage Device Sanitization for this listing).

c) (U) Disintegration: Disintegrate into particles that are nominally 2 milimeter edge length in size. It is highly recommended to disintegrate hard disk drive storage devices in bulk lots with other storage devices.

d) (U) Incineration: Internal platter coating must be reduced to ash and/or internal platters must be physically deformed from heating.

2) (U) Declassification: Declassify hard disk drives only after approved verification and review of procedures are completed per Reference b.

3) (U) Release: Unless otherwise specified by the appropriate IS Security Officer (or equivalent), declassified hard disk drives may be released for disposal or recycling only after sanitization procedures and a declassification review have been completed per Reference b.

b. (U) Diskettes

1) (U) Sanitization: Sanitize diskettes by using one of the following procedures. Remove all labels or markings that indicate previous use or classification.

a) (U) Degaussing: Degauss the diskettes in an NSA/CSS evaluated degausser per Reference a.

b) (U) Disintegration: Disintegrate diskettes using an NSA/CSS evaluated disintegrator per Reference c.

c) (U) Incineration: Material must be reduced to ask.

d) (U) Shredding: Shred diskettes using an NSA/CSS evaluated crosscut shredder per Reference d. Remove diskette cover and metal hub prior to shredding.

2) (U) Declassification: Declassify diskettes only after approved verification and review procedures are completed per Reference b.

3) (U) Release: Unless otherwise specified by the appropriate IS Security Officer (or equivalent), declassified diskettes may be released for

disposal or recycling only after sanitization procedures and a declassification review have been completed per Reference b.

(U) OPTICAL STORAGE DEVICES

4. (U) Optical storage devices include Compact Disks (CD), Digital Versatile Disks (DVD), and Blu-ray Disks (BD).

a. (U) Sanitization: Sanitize optical storage devices using one of the following procedures. Remove all labels or markings that indicate previous use or classification.

1) (U) Disintegration: Use of NSA/CSS evaluated disintegrator per Reference c. to sanitize only CD and DVD storage devices. BDs cannot be sanitized by this method.

2) (U) Embossing/Knurling: Use an NSA/CSS evaluated optical storage device embosser/knurler per Reference e. to sanitize only CD and DVD storage device. BDs cannot be sanitized by this method.

3) (U) Grinding: Use an NSA/CSS evaluated optical storage device grinder, per Reference e. to sanitize only CD storage devices. DVDs or BDs cannot be sanitized by this methd.

4) (U) Incineration: Material must be reduced to ash.

5) (U) Shredding: Use an NSA/CSS evaluated optical storage device per Reference e, to sanitize only CD and DVD storage devices. BDs cannot be sanitized by this method.

b. (U) Declassification: Declassify optical storage devices only after approved verification and review procedures are completed per Reference b.

c. (U) Release: Unless otherwise specified by the appropriate IS Security Officer (or equivalent), declassified optical storage devices may be released for disposal or recycling only after sanitization procedures and a declassification review have been completed per Reference b.

(U) SOLID STATE STORAGE DEVICES

5. (U) Solid Sate Strage Devices include Random Access Memory (RAM), Read Only Memory (ROM), Field Programmable Gate Array (FPGA), Smart Cards, and Flash Memory.

a. (U) Sanitization: Sanitize solid state devices using one of the following procedures. Remove all labels or markings that indicate previous use or classification.

1) (U) Disintegration: Disintegrate into particles that are nominally 2 millimeter edge length in size using an NSA/CSS evaluated solid sate disintegrator per Reference h. It is highly recommended to disintegrate solid state storage devices in bulk lots with other storage devices.

2) (U) Incineration: Material must be reduced to ash.

3) (U) Power Removal: Sanitize only DRAM, SRAM, and Volatile FPGA by removing the power, including backup batteries. Once power is removed, sanitization is instantaneous.

4) (U) Strip Shredding or Cutting: Sanitize only Smart Cards using one of the following procedures.

a) (U) Strip Shredding: A Strip Shredder with a maximum width of 2 millimeters will destroy the microchip, barcode, magnetic strip and written information on the Smart Card. Smart Cards must be inserted diagonally into the strip shredder at a 45-degree angle for proper sanitization.

(U) NOTE: A CROSS CUT SHREDDER WILL NOT SANTIZE SMART CARDS.

b) (U) Cutting: Cut the Smart Card into strips diagonally at a 45-degree angle, insuring that the microchip is cut through the center. Insure that the barcode, magnetic strip, and written information are cut into several pieces and the written information is unreadable.

b. (U) Declassification: Declassify solid state storage devices only after approved verification and review procedures are completed per Reference b.

c. (U) Release: Unless otherwise specified by the appropriate IS Security Officer (or equivalent), declassified solid state storage devices may be released for disposal or recycling only after sanitization procedures and a declassification review have been completed per Reference b.

(U) HARD COPY STORAGE DEVICES

6. (U) Hard Copy Storage Devices include paper, microforms, and cathode ray tube and plasma monitors with *burn-in*.

a. (U) Sanitization: Sanitize hard copy storage devices using one of the following procedures.

1) (U) Sanitize paper by using one of the following procedures.

a) (U) Burning: Material must be reduced to ash.

b) (U) Chopping, Pulverizing, Wet Pulping: Material residue must be reduced to pieces 5 millimeters square or smaller.

c) (U) Disintegration: Disintegrate paper using and NSA/CSS evaluated disintegrator per Reference c.

d) (U) Shredding: Shred paper using an NSA/CSS evaluated crosscut shredder per Reference d.

2) (U) Sanitize microforms by burning. Material must be reduced to ash.

3) (U) Sanitize cathode ray tube and plasma monitors exhibiting burn-in by destroying the surface of the monitor into pieces no larger than 5 centimeters square.

b. (U) Declassification: Declassify hard copy storage devices only after approved verification and review procedures are completed per Reference b.

c. (U) Release: Unless otherwise specified by the appropriate IS Security Officer (or equivalent), declassified hard copy storage devices may be released for disposal or recycling g only after sanitization procedures and a declassification review have been completed per Reference b.

(U) RESPONISBILITIES

7. (U) Logistics Services Center for Storage Device Sanitization Research shall provide technical guidance for the sanitization and release of IS storage devices.

8. (U) NSA/CSS and all elements using this manual shall:

a. (U) Protect classified or sensitive information, and make final decisions to declassify or release IS storage devices or refer to there is security officer for guidance;

b. (U) Establish and maintain a compilation of guidance and procedures for the sanitization, declassification, and release of classified or sensitive information on IS storage devices; and

c. (U) Comply with the Office of the Director of National Intelligence, Intelligence Community Directive 503 “Intelligence Community Information Technology Systems Security Risk Management, Certification and Accreditation”, dated 15 September 2008 (Reference f).

d. (U) Ensure that all media considered to be Agency Owned Accountable Property (AOAP) *(see definition)* is administered in accordance with NSA's Property Management Policies and Procedures. Proper documentation is needed for media that meets the AOAP criteria and is designated for destruction. This documentation will ensure the accountability and traceability of all AOAP. For specific guidance on these Policies and Procedures please contact your organization's Property Officer. (Reference g).

(U) REFERENCES

9. (U) References:

a. (U) NSA/CSS "Evaluated Products List – Degausser", as amended.

b. (U) NSA/CSS Policy 6-22, "Label, Declassification and Release of NSA/CSS Information Storage Media", dated 18 October 2012.

c. (U) NSA/CSS EPL 02-02 NSA/CSS Evaluated Products List for High Security Disintegrators, as amended.

d. (U) NSA/CSS EPL 02-01, NSA/CSS Evaluated Products List for High Security Crosscut Paper Shredders, as amended.

e. (U) NSA/CSS EPL 04-02 NSA/CSS Evaluated Products List for Optical Media Destruction Devices, as amended.

f. (U) Office of the Director of National Intelligence, Intelligence Community Directive 503 "Intelligence Community Information technology Systems Security Risk Management, Certification and Accreditation", dated 15 September 2008.

g. (U) NSA/CSS Financial Management Manual 7-2, Volume 4, Chapter 6. "Property, Plant, and Equipment," to include Chapter 6 Annexes, dated June 2009.

h. (U) NSA/CSS EPL 13-09, NSA/CSS Evaluated Products List for High Security Solid State Destruction Devices, as amended.

(U) DEFINITIONS

10. (U) Agency Owned Accountable Property – Refer to Reference g.

11. (U) Burn in – A tendency for an image that is shown on a display over a long period of time to become permanently fixed on the display. This is sometimes seen in emissive displays such as cathode ray tube and plasma, because chemical changes can occur in the phosphors when exposed repeatedly to the same electrical signals.

12. (U) Declassification – An administrative decision/action, based on a consideration of risk by the owner, whereby the classification of a properly sanitized storage device is downgraded to UNCLASSIFIED.

13. (U) Degausser – An electrical device or permanent magnet assembly which generates a coercive magnetic force for the purpose of degaussing magnetic storage devices or other magnetic material.

14. (U) Degaussing (or Demagnetizing) – Process for reducing the magnetization of a storage device to zero by applying a reverse (coercive) magnetizing force, rendering any previously stored data unreadable and unintelligible, and ensuring that it cannot be recovered by any technology known to exist.

15. (U) Information Systems (IS) Storage Devices – The physical storage devices used by an IS upon which data is recorded.

16. (U) Recycling – End state for IS storage devices processed in such a way as to make them ready for reuse, to adapt them to a new use, or to reclaim constituent materials of value.

17. (U) Sanitization – The removal of information from the storage device such that data recovery using any known technique or analysis is prevented. Sanitization includes the removal of data from the storage device, as well as the removal of all labels, markings, and activity logs. The method of sanitization varies depending upon the storage device in question, and may include degaussing, incineration, shredding, grinding, embossing, etc.