

SOP COVER SHEET

1. Pine Bluff Arsenal

STANDING OPERATING PROCEDURE FOR:

- 2. ITEM: Solid Wastes
- 3. OPERATION: '86 Landfill Operations
- 4. EST DAILY PRODUCTION RATE: NA
- 5 ORGANIZATION: AMSSB-OPB-RRE
- 6. SOP NO: EM-014 DATE: 1 AUG 1989
- a. REV NO: 2 DATE: 16 JUN 2003
- b. CHANGE NO: DATE:
- 7. AUTHORITY: NA

8. PREPARED BY: *Doug Mckim 6/23/03* TITLE: Environmental Engineer
 DOUG MCKIM Date

9. REVIEWED BY: *Charlie Neel 6/23/03* TITLE: Ch, Environmental Compliance Div
 CHARLIE NEEL Date

10. SUBMITTED BY: *Charlie Neel 6/23/03* TITLE: Acting Dir, Risk Management and Regulatory Affairs
 CHARLIE NEEL Date

11. CONCURRENCES:

OFFICE	SIGNATURE/DATE	TITLE
PUBLIC WORKS	<u><i>Willie E. Thomas</i></u> WILLIE E. THOMAS	DIRECTOR
MATERIAL MANAGEMENT	<u><i>Henry Love</i></u> HENRY LOVE	DIRECTOR
INDUSTRIAL HYGIENE	<u><i>Jerry D. Weilacher 6/30/03</i></u> JERRY D. WEILACHER	CHIEF
SAFETY DIVISION	<u><i>Mark Lumpkin 7/11/03</i></u> MARK LUMPKIN	CHIEF

REC'D - PBA XO

12. Pre-Operation Approval: *Larry E. Wright PE* JUL 11 2003
 Larry E. Wright PE DATE
 Executive Assistant

13. Approval: *Mark R. Henscheid 11 July 03*
 Mark R. Henscheid DATE
 COL, CM
 Commanding

SOP COVER SHEET
(Continued)

13. ANNUAL REVIEW:

DATE	SIGNATURE	TITLE
_____	_____	Chief, Industrial Hygiene
_____	_____	Director, Material Management
_____	_____	Director, Public Works
_____	_____	Chief, Safety Office

APPROVAL:

Mark R. Henscheid
COL, CM
Commanding

DATE

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SUPERVISOR'S STATEMENT

1. The Supervisor will sign this statement:
 - a. When first assigned as supervisor of this operation.
 - b. When an approved change is made to the SOP.
 - c. At least once per quarter during continuing operations.
 - d. After absence from the job in excess of 15 consecutive workdays.

2. I have personally reviewed each of the operational steps of the SOP and have no question in my mind that the operation can be performed safely and efficiently and in compliance with environmental restrictions noted in the SOP. I have verified to my satisfaction that operators have been trained and are capable of performing their part of the operation in a safe and efficient manner, and have instructed them to follow the SOP without deviation. Personnel that are assigned to this operation have been informed of the hazardous materials to which they may be exposed to and where the material safety data sheets (MSDS) are kept.

3. I understand that I am the point of contact for all emergency responders. In case of emergency, I will dispatch a messenger in the direction from which the responders are expected to come to inform them of the location, nature, and extent of the emergency.

4. Should I deem an emergency evacuation necessary, I will have all personnel congregate at a safe centralized location for a head count. They are to remain there until released by me.

5. If I discover an industrial accident, I will immediately notify the U.S. Army Health Clinic (x3400) and the Safety Office, and inform them of the extent of injuries and the operations being performed at this location. If a fire is involved, I will also notify the Fire Department (x3500).

6. I will report all injuries and accidents to the Safety Office and my supervisor no later than the next duty day.

SUPERVISOR'S PRINTED NAME	SUPERVISOR'S SIGNATURE	DATE

OPERATOR'S STATEMENT

1. The operator will sign this statement:
 - a. When first assigned the operation.
 - b. When an approved change is made to the SOP.
 - c. At least once per quarter during the operation.
 - d. After absence from the job in excess of 15 consecutive workdays.
2. I have read or have had read to me, and understand the general and specific safety requirements, environmental requirements, the personnel and explosive limits, and the work description and inspection requirements necessary to accomplish my operation. I have been thoroughly trained in, and am familiar with my part of the operation and agree to abide by these instructions throughout my assignment to the operation. I have been informed of the hazardous materials to which I may be exposed to and where the material safety data sheets (MSDS) are kept.
3. I understand I may be appointed by my supervisor as a messenger to meet emergency responders in case of emergency. I will inform them of the location, nature, and extent of the emergency.
4. In emergency situations requiring evacuation, I will proceed to a location designated by my supervisor for a head count and remain there until released.
5. If I discover an industrial accident, I will notify the U.S. Army Health Clinic (x3400), and inform them of the extent of injuries and the type of operations being performed at this location. If a fire is involved, I will also notify the Fire Department (x3500).
6. I will report all injuries and accidents to my immediate supervisor.

OPERATOR'S PRINTED NAME	OPERATOR'S SIGNATURE	DATE

REMARKS

GENERAL SAFETY REQUIREMENTS

1. U.S. Army Health Clinic, Bldg. 13-020, provides first aid and emergency medical treatment of all personnel involved in activities on post.
2. All personnel will adhere to the PBA Heat Stress Plan.
3. A pre-operation checklist will be completed by D/PW prior to start of operations.
4. The applicable portions of the Standing Operating Procedures (SOP) shall be conspicuously posted in rooms or bays involved in the operation. Supervisory personnel shall maintain copies of a complete standing operating procedure and be responsible for the enforcement of its provisions.
5. Any defect or unusual conditions noted that is not covered by this SOP will be reported immediately to the supervisor.
6. Only non-sparking tools shall be used in locations where sparks may cause a fire or explosion. These and all other tools should be maintained to a serviceable condition.
7. Operators in proximity to steel banding operations will wear face shields or visiting in eye hazard areas. Industrial safety eyeglasses shall meet all the requirements of ANSI/ASME Standard Z87.1 and 29 CFR 1910.133. Safety glasses shall be equipped with side shields.
8. No smoking, eating, or drinking should be permitted in the work areas. Separate break areas and washing facilities should be provided. Personnel should wash hands prior to eating, drinking, smoking or using toilet facilities. All exposed areas of the body should be washed at the end of each workday.
9. All areas where acids, caustics, corrosive materials, or hazardous chemicals are stored, used or handled must be provided with emergency shower and eye wash station. For field type operations, an approved water supply with portable shower and eye wash fountain may be used with the approval of Safety Office.
10. Lifting shall be with the knees bent and the back straight in order that the thigh muscles may assume the greater portion of the load. If the object to be lifted is too awkward or too heavy to be handled in this position, additional help shall be obtained to move the load. Lifts shall be made vertically and close to the body. Side lifts or off-balance lifts frequently result in muscle strains.
11. All operations, work sites and equipment that have a noise level of 85 dB or more must be posted with approved signs or decals warning of the noise hazard. All personnel must be provided with, and wear, approved hearing protection when in, on, or working in posted areas. Health Clinic will monitor these individuals annually.
12. Operations where dusts, vapors or gases are present should have an Industrial Hygienist evaluate the hazard to determine whether respirators are needed and to identify the appropriate type of respirator in the list of equipment for that operation.
13. The degree of hazard associated with PENTA treated packing materials cannot be determined by visual examination. There are no quantifiable criteria to use in judging such items as "loose" or "excessive." Therefore, the following information is disseminated to provide final guidance on protective measures for handling treated wood. This guidance should be followed under the direction of a resident Industrial Hygienist who has evaluated the actual PENTA exposure in question.

- a. Prevent inhalation, ingestion, skin and eye contact.
 - b. Good housekeeping is essential to prevent re-entertainment of chemical treatment crystals or wood dust.
 - c. Prevention of skin and eye contact through the use of gloves, coveralls, and goggles. The type of gloves to be worn is dependent upon the characteristics of the wood being handled. Coveralls that are laundered on a routine basis (preferably daily) should be worn. The coveralls should not be taken home but should remain at PBA. When handling wood with visible crystals or when generating wood dust, chemical goggles should be worn.
 - d. An approved respirator with dust pre-filter must be worn when sawing and machining treated wood if the airborne chemical treatment concentration exceeds, or is expected to exceed the threshold limit value (TLV).
14. Each material handling equipment (MHE) vehicle operator will have in his possession a valid operator's permit for particular piece of equipment to be operated.
15. Lifting devices will be inspected and tested IAW TB 43-0142. The load rating and next inspection will be stenciled on basic units, which must be clearly visible to operators. The use of color-coding, pressure sensitive tapes, metal tags or a combination of these will mark hoists, chains, slings, and hooks. The load rating will not be exceeded and the equipment will not be used without a current inspection date.
16. Vehicle refueling: Gasoline and diesel-powered vehicles and equipment will not be refueled inside a landfill cell.
- a. Use the smallest available size-refueling unit, consistent with the mission.
 - b. Do not allow smoking or open flame devices within 50 feet of gasoline or diesel refueling. At least one person must be present during the entire operation. During the refueling, stop the motor of both the vehicle being refueled and the refueling truck (unless the refueling truck motor drives the pump).
 - c. In the event of a fuel spill, immediately notify the installation fire department. Do not start the motors of the refueling truck or unit being refueled until the area is rendered safe by the fire department.
 - d. If portable containers are used for refueling, they shall be approved safety cans with a flame arrestor screen, which does not exceed 5-gallon capacity.
17. No smoking, eating, or drinking should be permitted in the work areas. Separate break areas and washing facilities should be provided. Personnel should wash hands prior to eating, drinking, smoking, or using toilet facilities. All exposed areas of the body should be washed at the end of the workday.
18. Personnel will not smoke unless they are in a designated smoking area that has been approved by the Safety Office per regulatory guidance and Command Policy Letters.
19. Personnel working in the landfill operation will be required to receive 24 hours of training in hazardous waste management before working at this site. The training requirement is in accordance with Permit 9-H.

20. All personnel will receive a pre-employment physical and an annual follow-up. Medical physical requirements are outlined in the Site Safety and Health Plan.
21. All visitors requesting to enter a landfill cell will be required to wear the same protective equipment as outlined for operators. The cell boundary is defined as the outer row of support columns.
22. Vehicle maintenance is prohibited within a landfill cell.
23. Landfill operations should not take place during periods of adverse weather (i.e. thunderstorms, ice, snow, high winds, high temperatures).
24. Handle all containers of waste on paved areas prior to disposal to facilitate clean-up in the event of a spill.

OPERATIONS FORMAT

A. STANDING OPERATING PROCEDURE FOR:
 '86 Landfill Operations

G. OPERATION: Landfill Disposal

B. OPERATION NO.: 1

H. EXPLOSIVE LIMITS:

UNITS: NA

EXPLOSIVE LBS: NA

C. BAY: NA

I. PERSONNEL LIMITS:

OPERATORS:

TRANSIENTS:

D. SOP NO. EM-014 DATE: 1 AUG 1989

E. REV NO. 2 DATE: 1 JUNE 2003

J. HAZARD PAY: NA

F. CHG NO.: NA DATE: NA

STEP	DESCRIPTION	STEP	SPECIFIC INSTRUCTION Safety (S), Operational (O), Quality Check (QC)
NOTE:			
(1) Although the landfill cannot currently accept hazardous wastes, it is still regulated by a Hazardous Waste Permit. The gate must remain closed and locked at all times when authorized personnel are not present at the landfill.			
(2) All personnel must sign-in upon entering the landfill area and must sign-out upon exiting the landfill area. A logbook is located in the Personnel Support Trailer. Operators should inform visitors and transients who may not be familiar with this SOP or this requirement.			
(3) A minimum of two personnel must be present during any waste-handling activities and during activities in a landfill cell.			
(4) Wastes may not be delivered to the landfill without being checked and accepted by a representative of the Directorate of Material Management.			
1.	Personal protective clothing and equipment.	1a.	(S) All operators will wear: Fire Retardant Coveralls Safety boots with steel toe Leather gloves Safety Glasses Hearing protection (when near operating heavy equipment) This clothing may be donned and doffed at the operator's normal change-room area.
		1b.	(S) In addition to the clothing listed in 1a, operators involved in banding operations will wear a face shield.
		1c.	(S) In addition to the equipment listed in 1a, all personnel entering a landfill cell will wear: Half-face respirator with high efficiency filter

STEP	DESCRIPTION	STEP	SPECIFIC INSTRUCTION Safety (S), Operational (O), Quality Check (QC)
			<p>(P100). Disposable Tyvec Suit w/ disposable booties</p> <p>The tyvec suit will be donned and doffed at the landfill. Used tyvec clothing and other protective clothing will be placed in a waste receptacle in the trailer for turn-in as waste (this waste must be properly characterized and accounted for and not just thrown in the landfill).</p> <p>1d. (S) During all waste management activities at the landfill site, the following equipment will be immediately available to the operators, either in their possession or stationed close to the operation being performed:</p> <p style="padding-left: 40px;">Two-way Radios 2 ABC-Type Fire Extinguishers</p> <p>1e. (S) Waste transporters may enter the landfill area and landfill cells (to dump bulk loads of waste) in normal work clothing as long as they stay in their vehicle. If exiting a vehicle in a cell, protective clothing as listed in 1a and 1c must be worn.</p> <p>1f. (S) Visitors and transients may enter the landfill area in street clothing but must stay outside of the landfill cells and must not handle waste or waste containers.</p> <p>1g. (S) Industrial Hygiene will assess hazards at during operations and recommend any necessary changes in personnel protective clothing and equipment.</p>
2.	Review any special handling precautions for the waste (all personnel).	2a.	(S) When a transporter of waste delivers waste to the landfill, review the paperwork provided by the transporter of the waste prior to off-loading or handling the waste. It will contain two copies (one for DPW and one for DMM) of the profiles for the waste being disposed, including attached MSDS, analysis and/or special instructions for handling the waste. Contact the Directorate of Material Management or the Directorate Risk Management and Regulatory Affairs if anything about the waste seems unusual or out of place.
3.	Check waste and paperwork (D/MM).	3a.	(O) Check the waste and paperwork in accordance with the checklist contained in Appendix H. Complete the checklist contained in Appendix H for each shipment of waste (After the waste is placed in the landfill, and the disposal location is recorded on the Chain of Custody, a copy of the checklist will be attached to the paperwork).
		3b.	(O) For non-bulk containers of waste, the containers will have to be offloaded to check (Step 5) the waste. A minimum of 5% of the containers (at random) from each shipment must be opened to check the contents. Record the number that was opened on the waste acceptance checklist.

STEP	DESCRIPTION	STEP	SPECIFIC INSTRUCTION
			Safety (S), Operational (O), Quality Check (QC)
		3c.	Assign disposal location from information on profile and available space in cell.
4.	Accept/Reject Waste (D/MM).	4a.	(O) If the waste and paperwork conform to what is required by the checklist, it can be accepted for disposal.
		4b.	(O) If the waste or paperwork does not conform to the checklist, the waste is not to be disposed. Instruct the transporter to correct the paperwork and if it cannot be corrected, return the paperwork to the transporter and instruct him to return the waste to the generator.
5.	Locate transport vehicle for off-loading of drums (D/MM)	5a.	(O) Instruct the waste transporter where to park his vehicle for off-loading. Waste containers (non-bulk) should be offloaded near the entrance to the cell on the pavement. The transport vehicle should be located in a level, sturdy area for unloading.
6.	Dump Bulk Container (D/MM).	6a.	(S) Protective clothing is required if the driver leaves the cab to dump load.
		6b.	(O) Instruct the transporter to place the bulk load in the cell.
7.	Offload pallets of containers (D/PW or D/MM).	7a.	(O) Offload pallets of containers using a forklift and place them near the entrance to the cell where they will be disposed.
8.	Remove Banding (D/PW or D/MM).	8a.	(S) Operators in proximity to steel banding operations will wear face shields or visiting in eye hazard areas. Industrial safety eyeglasses shall meet all the requirements of ANSI/ASME Standard Z87.1 and 29 CFR 1910.133. Safety glasses shall be equipped with side shields.
		8b.	(O) Cut banding and remove. Place banding in a scrap container.
9.	Load container in loader bucket (D/PW).	9a.	(S) Do not lift drums by hand.
		9b.	(O) Load a container onto the loader bucket using forklift and drum grabbers.
10.	Place container in cell (D/PW).	10a.	(S) Industrial Hygiene will perform a noise survey and assign level of hearing protection.
		10b.	(S) Take care placing the container or the waste. The landfill has a liner that could be damaged by the careless placement of drums.
		10c.	(S, O) Wastes shall be placed as shown in Appendix I. Roadways other than the perimeter road will be maintained as fire breaks and shall be extended to the edges of the landfill

STEP	DESCRIPTION	STEP	SPECIFIC INSTRUCTION Safety (S), Operational (O), Quality Check (QC)
		10d.	cell. Either non-combustible wastes or soil will be used to maintain the height of the road equal to or above the height of surrounding wastes. A weight ticket for non-waste material shall be left in the Personnel Support Trailer to that the amount of non-waste can be accounted for. (O) Move the container into the cell and place the container on its side in an orderly fashion in the final disposal location using heavy equipment. The containers should be packed in the landfill as tightly as possible to avoid empty spaces.
11.	Record the Disposal Location on the Chain of custody (D/MM).	11a.	(O) Record the disposal location (Cell #, Row, Column, and Depth) of each container on the Chain of Custody. (See Appendix D). Sign and date (MM) the chain of custody. Clip the completed Waste Acceptance Checklist to the Chain of Custody forms for the waste shipment.
12.	Cover Waste as Necessary (D/PW).	12a.	(O) Add soil or other types of waste as necessary to maintain a stable working platform and to fill any voids created by containers. (S) Maintain firebreaks as described in appendix I and cover each 3 foot level of waste with noncombustible material.
13.	End of Day Operations (D/PW).	13a.	(O) Wash all equipment that enters the cell at the Equipment Wash Rack prior to removing the equipment from the landfill area. (S) Personnel that enter the cell must wash hands before lunch and breaks and shower at the end of the workday.

L. SPECIAL REQUIREMENTS.

None.

M. EQUIPMENT, TOOLS, AND SUPPLIES

ITEM	QUANTITY	SPEC OR DWG	MSCN OR NSN
See Appendix A.			

STANDING OPERATING PROCEDURE FOR:
'86 LANDFILL OPERATIONS
OPERATION 1: LANDFILL DISPOSAL

SOP NO: EM-014 DATE: 1 AUG 1989
REV NO: 2 DATE: 1 AUG 2002
CHG NO: DATE:

**APPENDIX A
MATERIALS**

MATERIALS

ITEM	QUANTITY	SPEC OR DWG	MSCN OR NSN
Track Loader	1	Commercial	N/A
Forklift	1	Commercial	N/A
Radios, Two-way	1 (minimum)	Commercial	N/A
Pressure Washer	1	Commercial	N/A
Strapping Cutters	1	Commercial	N/A
Wrench, Ratchet-type	1	Commercial	N/A
Wrench, Crescent-type	1	Commercial	N/A
Drum Grabbers	1	Commercial	N/A
Tyvec Suits, full body	as needed	Commercial	N/A
Tyvec booties	as needed	Commercial	N/A
Portable Eyewash Station	1	Commercial	N/A
Leather Gloves	as needed	Commercial	N/A
Coveralls, Flame Retardant	as needed	Commercial	N/A
Glasses, Safety	as needed	Commercial	N/A

STANDING OPERATING PROCEDURE FOR:
'86 LANDFILL OPERATIONS
OPERATION 1: LANDFILL DISPOSAL

SOP NO: EM-014 DATE: 1 AUG 1989
REV NO: 2 DATE: 1 AUG 2002
CHG NO: DATE:

**APPENDIX B
PRE-STARTUP CHECK LIST**

Pre-Start Up Check List

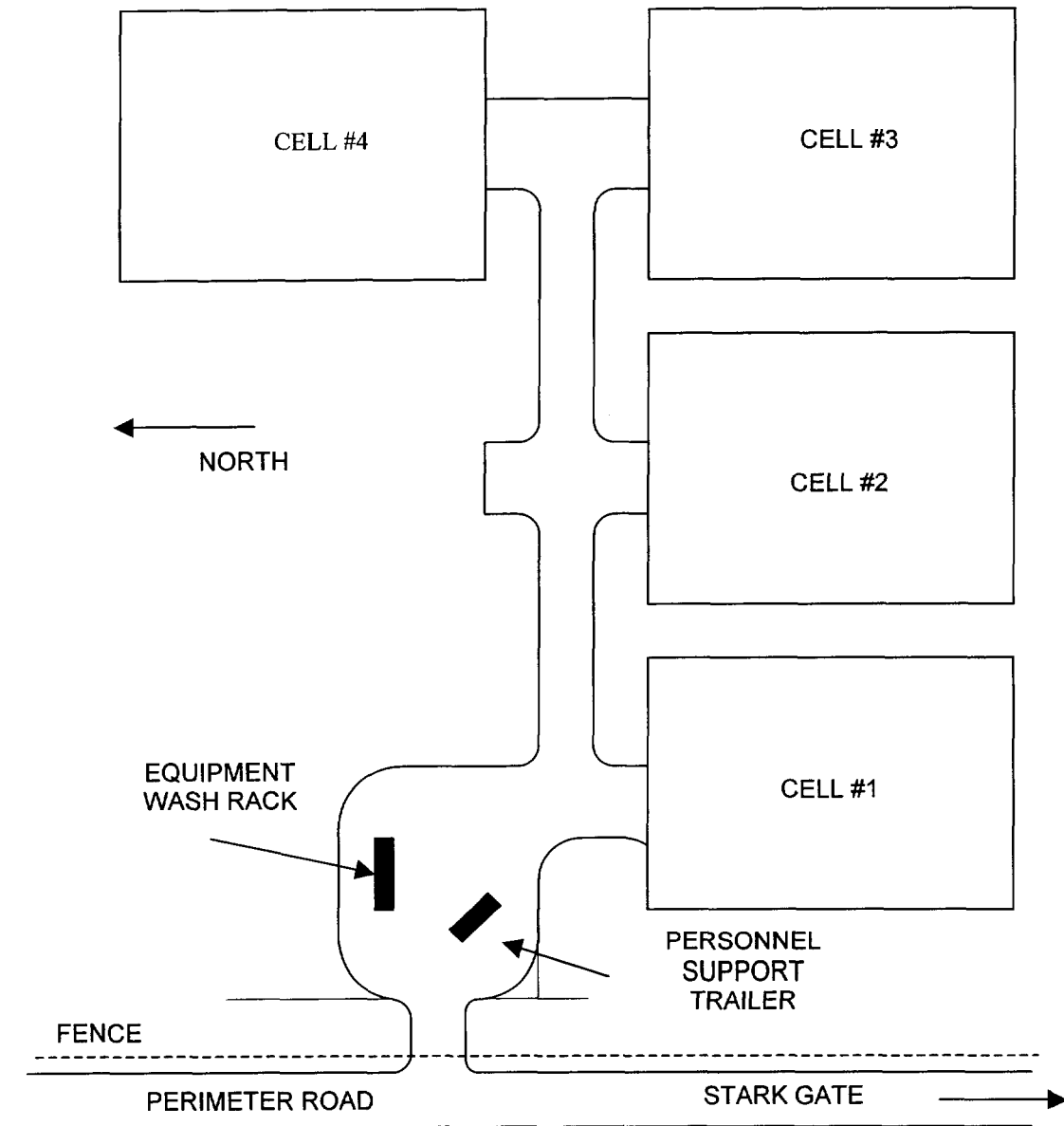
	CHECKLIST ITEM
	1. Radio's present and operational.
	2. Wash Rack is operational.
	3. Wastewater tanks at the Support Trailer and Wash Rack are not full. *
	4. Sewage holding tank at the Support Trailer is not full. *
	5. Eyewash stations are full and pressurized and stationed near work area.
	6. Fire extinguishers are full and stationed near work area.
	7. Drinking water is available in the personnel support trailer.

* Visually inspect for two feet of headspace on tanks.

STANDING OPERATING PROCEDURE FOR:
'86 LANDFILL OPERATIONS
OPERATION 1: LANDFILL DISPOSAL

SOP NO: EM-014 DATE: 1 AUG 1989
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CHG NO: DATE:

APPENDIX C
SITE LAYOUT

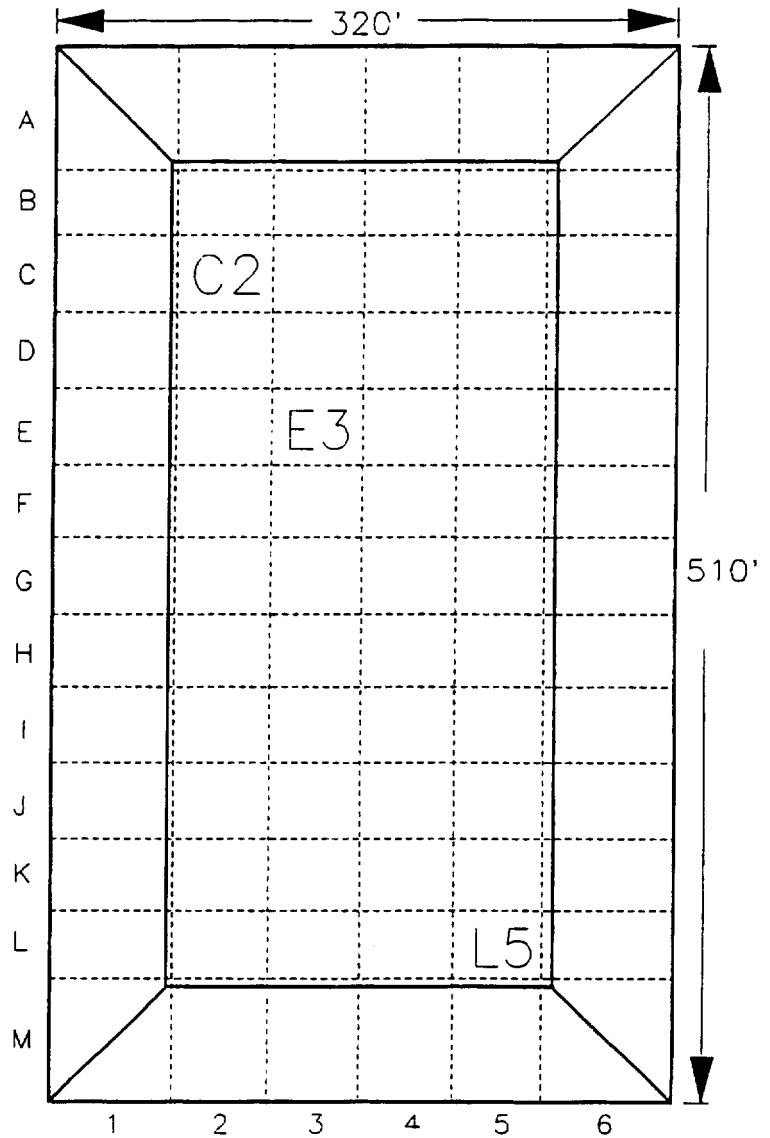


'86 Landfill Site Layout

STANDING OPERATING PROCEDURE FOR:
'86 LANDFILL OPERATIONS
OPERATION 1: LANDFILL DISPOSAL

SOP NO: EM-014 DATE: 1 AUG 1989
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CHG NO: DATE:

APPENDIX D
CELL LOCATION DESIGNATIONS



NOTE: Disposal cell divisions are on column centerlines. The designations are stenciled on the columns and the levels are marked on the footings and columns.

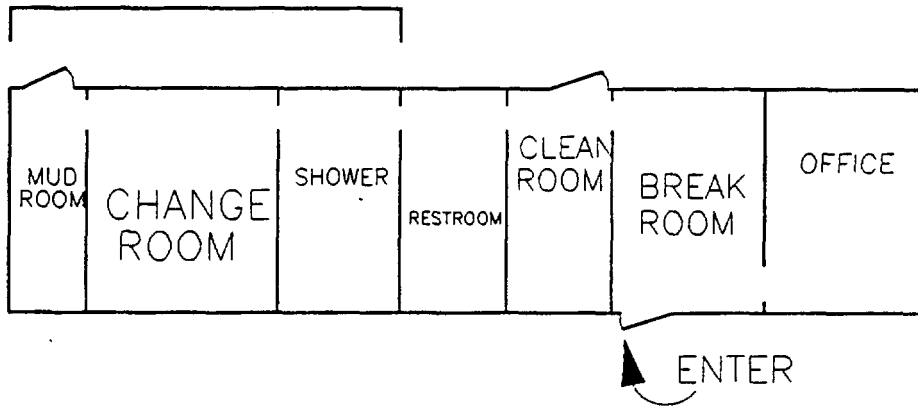
DISPOSAL CELL DESIGNATION

STANDING OPERATING PROCEDURE FOR:
'86 LANDFILL OPERATIONS
OPERATION 1: LANDFILL DISPOSAL

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APPENDIX E
PERSONNEL SUPPORT TRAILER LAYOUT

OPERATING PERSONNEL ONLY
DECONTAMINATION AREAS



PERSONNEL SUPPORT TRAILER

STANDING OPERATING PROCEDURE FOR:
'86 LANDFILL OPERATIONS
OPERATION 1: LANDFILL DISPOSAL

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APPENDIX F
OPERATIONAL HAZARD ANALYSIS

OPERATIONAL HAZARD ANALYSIS

SYSTEM: '86 Landfill
SUBSYSTEM: NA

PREPARED BY: Doug McKim
DATE ISSUED: 5/19/03

EVENT/PHASE	HAZARD DESCRIPTION	EFFECT ON THE SYSTEM	RAC	RECOMMENDED ACTION	RAC	REMARKS
Receipt of waste, unloading of containers.	Drop of container	Contamination of environment	IVC5	Non-bulk containers not transported without lid/cover. Spill response equipment available if needed. Only drums in good condition. Seal drums tightly. Handle drums on paved areas that can be easily cleaned up. No liquid wastes disposed of in landfill.	IVD5	General Safety Comments SOP, Appendix H
		Fractures and crushed tissue on feet or hands.	IIC3	Personnel wear protective footwear and leather gloves when handling waste. Handle drums with forklift and heavy equipment.	IIID5	In SOP, Step 1
Personnel inside trench area handling or disposing of waste	Operators exposed to waste	Acute effect: Irritation to eyes or exposed skin.	IIIB3	Wear appropriate PPE as specified in SOP: Coveralls, tyvec suit with booties, leather gloves and respirator. Review special handling precautions for all waste.	IVD5	In SOP, Step 1, 2, 6
		Chronic effect: respiratory illness; systemic toxic poisoning.		Annual medical surveillance and hazard communication training.		
		Muscle strain	IIB2	Use of forklift and machinery to handle containers as required.	IIID5	In SOP, Step 9
Depalletization of containers	Operator exposed to sharp-edged metal strapping.	Heat stress	IIIC4	Frequent breaks and drinking water available in the personnel support trailer. Area is covered (shaded). Landfill operators instructed to adhere to the PBA Heat Stress Plan.	IVD5	GSR #37 and # 2
		Lacerations to hands or fingers.	IIIB3	Use of leather is required when handling pallet strapping.	IVD5	In SOP, Step 8
Metal strapping springs out of position.	Metal strapping springs out of position.	Laceration to skin, eyes, or face.	IIC3	Use of face shield with safety glasses; coveralls and leather gloves is required during banding operations.	IVD5	In SOP, Step 8

OPERATIONAL HAZARD ANALYSIS

SYSTEM: '86 Landfill
SUBSYSTEM: NA

PREPARED BY: Doug McKim
DATE ISSUED: 5/19/03

EVENT/PHASE	HAZARD DESCRIPTION	EFFECT ON THE SYSTEM	RAC	RECOMMENDED ACTION	RAC	REMARKS
Vehicle entering and maneuvering inside trench	Heavy equipment use	Damage to landfill liner system.	IIIC3	Use of one access into each trench. Care taken in placing waste and covering liner with waste that will not puncture the liner.	IIID5	In SOP, Step 10
	Exposure to high noise levels of heavy equipment	Chronic hearing loss.	IIB2	Perform noise survey. Unless and until noise is shown to be below 85dB, wear hearing protection near heavy equipment	IVD5	In SOP, Step 10
Cover waste as necessary	Unauthorized waste disposed of in cell.	Incompatible wastes could cause reactions or fires. Specific effect on system would depend on exact waste disposed of.	IIB2	All waste to be disposed of is profiled and paperwork is double checked for accuracy at the landfill. Checklist is prepared to prevent any errors. Firewall construction in cell to limit fire to specific area.	IVD5	In SOP, step 12
End of Day Operations	Spread of waste outside cell	Exposure of unprotected personnel to waste	IIB3	Wash all equipment, wash hands before breaks and lunch and shower at the end of the day.	IVD5	In SOP, Step 13

STANDING OPERATING PROCEDURE FOR:
'86 LANDFILL OPERATIONS
OPERATION 1: LANDFILL DISPOSAL

SOP NO: EM-014 DATE: 1 AUG 1989
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CHG NO: DATE:

APPENDIX G
CHAIN OF CUSTODY

CHAIN OF CUSTODY				
WASTE DESCRIPTION:				
GENERATING PROCESS:				
DRUM CONTROL NUMBER(S):			PROFILE	
GENERATION SITE:		EPA WASTE CODE:		
WASTE WEIGHT:		BEGIN FILL DATE:		FULL DATE:
WASTE COORDINATOR NOTIFICATION:		TIME:		DATE:
GENERATOR STATEMENT: The above information is complete/accurate to the best of my knowledge.				
Signature:			Date:	
DISPOSITION OF WASTE: (From Waste Coordinator, Environmental Management)				
SSF:	LSF:	PSF:	ICF:	HWL:
SPECIAL INSTRUCTIONS:				
TRANSPORTER STATEMENT: I have inspected this material and found it to be in order as shown on this form. I accept this item for shipment to the storage site indicated above and will assume responsibility until signed over to the storage site representative.				
Signature:			Date:	
STORAGE SITE REPRESENTATIVE STATEMENT: I have inspected this material and found it to be in order as shown on this form. I accept this item for storage and assume responsibility until removed from this site.				
Signature:			Date:	
LOCATION OF WASTE AT STORAGE SITE:				
FINAL DISPOSITION OF WASTE:				
TREATMENT: FBI	RDF	CB	CG	
DISPOSAL: HW LANDFILL:	CELL:	GRID:	LEVEL:	
OFF-POST SHIPMENT:				
OTHER: SPECIFY:				
SIGNATURE:			DATE:	

PBA FORM710-14E

1 OCTOBER 2000

Figure 1: Sample Form 710-14E; please use most recent version as updated and available electronically.

STANDING OPERATING PROCEDURE FOR:
'86 LANDFILL OPERATIONS
OPERATION 1: LANDFILL DISPOSAL

SOP NO: EM-014 DATE: 1 AUG 1989
REV NO: 2 DATE: 1 AUG 2002
CHG NO: DATE:

APPENDIX H
LANDFILL WASTE ACCEPTANCE CHECKLIST

LANDFILL WASTE ACCEPTANCE CHECKLIST

Date: _____ Name of Transporter: _____

Time: _____ Acceptance Check by: _____

OK	NOT OK	CHECKLIST ITEM
		Each container, bulk or drum, has a Chain of Custody.
		Each Chain of Custody lists the following information: <input type="checkbox"/> Generation Site (mandatory) <input type="checkbox"/> Container Number (optional) <input type="checkbox"/> Profile Number (mandatory) <input type="checkbox"/> Generation Date (mandatory) <input type="checkbox"/> Weight of waste (mandatory)
		The Chain of Custody has been signed and the name is legible.
		Two copies of each profile is attached.
		The waste profiles have all been signed and are less than one year old.
		The waste description on the profile matches the actual waste being disposed. The container should not contain items not listed on the profile (plastic, pipe, PPE, etc.) Please list all containers that were opened in the comments section below.
		The profile indicates that the waste can be land filled on PBA.
		Each non-bulk container is at least 90% full.
		There are no free liquids.
		For any waste ash or other waste that has been heated, feel the outside of each container to make sure the contents are at an ambient temperature. Any detectible warmth coming from the contents of the container indicates that the container should not be accepted for disposal.
Notes (including number of containers opened):		

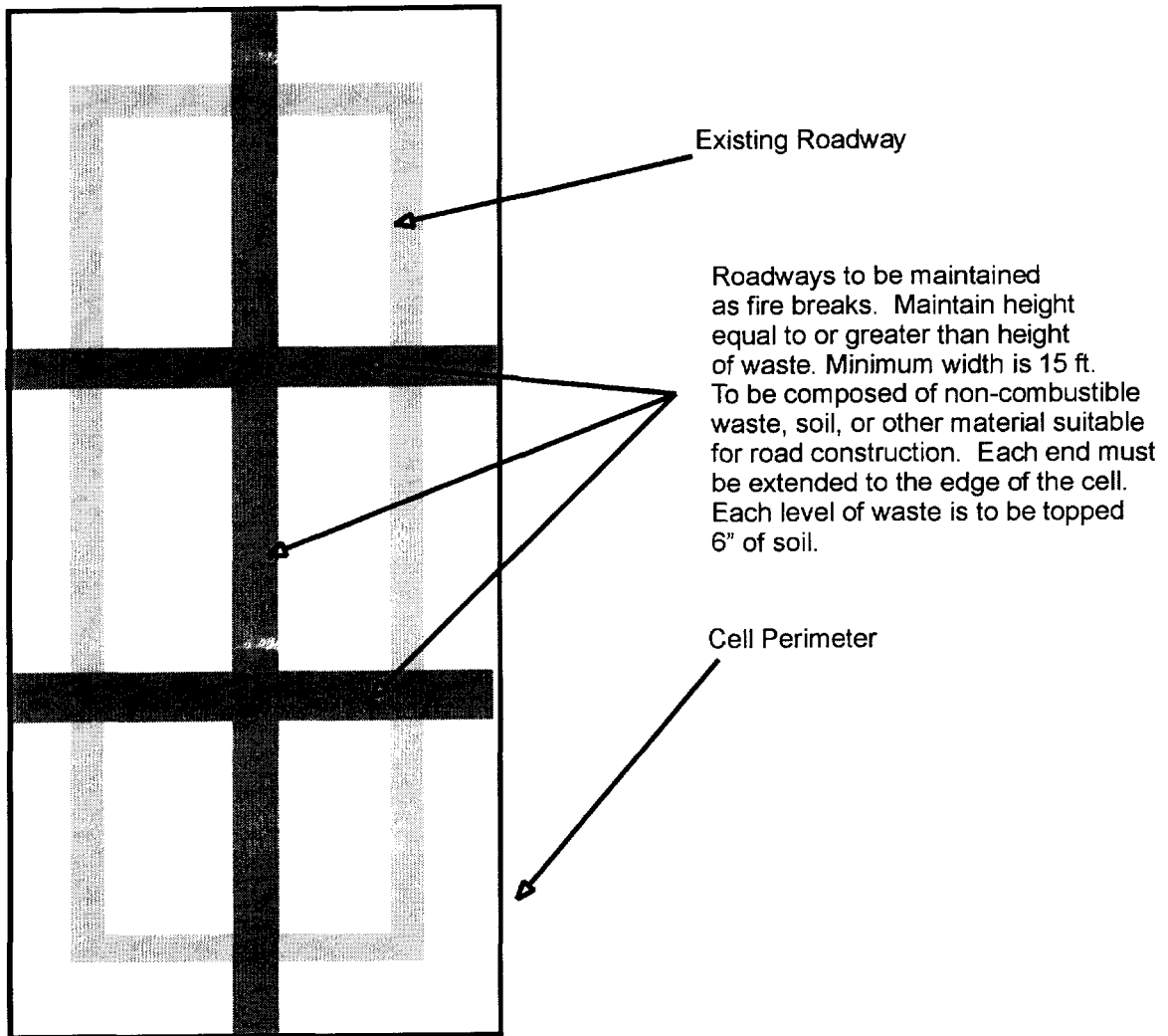
STANDING OPERATING PROCEDURE FOR:
'86 LANDFILL OPERATIONS
OPERATION 1: LANDFILL DISPOSAL

SOP NO: EM-014
REV NO: 2
CHG NO:

DATE: 1 AUG 1989
DATE: 1 AUG 2002
DATE:

APPENDIX I
FIRE BREAK CONSTRUCTION

Landfill Fire Break Construction



SOP COVER SHEET

1. Pine Bluff Arsenal

STANDING OPERATING PROCEDURE FOR:

- 2. ITEM: Solid Wastes
- 3. OPERATION: '86 Landfill Operations
- 4. EST DAILY PRODUCTION RATE: NA
- 5 ORGANIZATION: AMSSB-OPB-RRE
- 6. SOP NO: EM-014 DATE: 1 AUG 1989
- a. REV NO: 2 DATE: 16 JUN 2003
- b. CHANGE NO: DATE:
- 7. AUTHORITY: NA

- 8. PREPARED BY: *Doug Mckim 6/23/03* TITLE: Environmental Engineer
DOUG MCKIM Date
- 9. REVIEWED BY: *Charlie Neel 6/23/03* TITLE: Ch, Environmental Compliance Div
CHARLIE NEEL Date
- 10. SUBMITTED BY: *Charlie Neel 6/23/03* TITLE: Acting Dir, Risk Management and Regulatory Affairs
CHARLIE NEEL Date

11. CONCURRENCES:

OFFICE	SIGNATURE/DATE	TITLE
<u>PUBLIC WORKS</u>	<u><i>Willie E. Thomas</i></u> WILLIE E. THOMAS	<u>DIRECTOR</u>
<u>MATERIAL MANAGEMENT</u>	<u><i>Henry Love</i></u> HENRY LOVE	<u>DIRECTOR</u>
<u>INDUSTRIAL HYGIENE</u>	<u><i>Jerry D. Weilacher 6/30/03</i></u> JERRY D. WEILACHER	<u>CHIEF</u>
<u>SAFETY DIVISION</u>	<u><i>Mark Lumpkin 7/11/03</i></u> MARK LUMPKIN	<u>CHIEF</u>

REC'D - PBA XO

- 12. Pre-Operation Approval: *Larry E. Wright* JUL 11 2003
Larry E. Wright P.E.
Executive Assistant DATE
- 13. Approval: *Mark R. Henscheid* 11 July 03
Mark R. Henscheid
COL, CM
Commanding DATE

SOP COVER SHEET

1. Pine Bluff Arsenal

STANDING OPERATING PROCEDURE FOR:

- 2. ITEM: Solid Wastes
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- 6. SOP NO: EM-014 DATE: 1 AUG 1989
- a. REV NO: 2 DATE: 16 JUN 2003
- b. CHANGE NO: DATE:
- 7. AUTHORITY: NA

8. PREPARED BY: *Doug Mckim 6/23/03* TITLE: Environmental Engineer
 DOUG MCKIM Date

9. REVIEWED BY: *Charlie Neel 6/23/03* TITLE: Ch, Environmental Compliance Div
 CHARLIE NEEL Date

10. SUBMITTED BY: *Charlie Neel 6/23/03* TITLE: Acting Dir, Risk Management and Regulatory Affairs
 CHARLIE NEEL Date

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INDUSTRIAL HYGIENE	<u><i>Jerry D. Weilacher 6/30/03</i></u> JERRY D. WEILACHER	CHIEF
SAFETY DIVISION	<u><i>Mark Lumpkin 7/11/03</i></u> MARK LUMPKIN	CHIEF

REC'D - PBA XO

12. Pre-Operation Approval: *Larry E. Wright PE* JUL 11 2003
 Larry E. Wright PE DATE
 Executive Assistant

13. Approval: *Mark R. Henscheid* 11 July 03
 Mark R. Henscheid DATE
 COL, CM
 Commanding

SOP COVER SHEET

1. Pine Bluff Arsenal

STANDING OPERATING PROCEDURE FOR:

- 2. ITEM: Solid Wastes
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8. PREPARED BY: *Doug Mckim 6/23/03* TITLE: Environmental Engineer
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<u>INDUSTRIAL HYGIENE</u>	<u><i>Jerry D. Weilacher 6/30/03</i></u> JERRY D. WEILACHER	<u>CHIEF</u>
<u>SAFETY DIVISION</u>	<u><i>Mark Lumpkin 7/11/03</i></u> MARK LUMPKIN	<u>CHIEF</u>

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