

MEDICAL WASTE SERVICES, LLC

OPERATIONS PLAN

Biohazardous Medical Waste Treatment Facility

3017 N Rockwell Ave, Casa Grande, Arizona 85122

Revised Operations Plan with Supporting Appendices

This document sets out the operating procedures for the receipt, handling, treatment, temporary storage, and final disposition of regulated medical waste at the Medical Waste Services, LLC facility in Casa Grande, Arizona. It is organized as an operations plan and includes supporting appendices intended to assist with ADEQ facility plan review.

Applicant Review Items

The following items remain to be confirmed or attached before submittal. These are retained as review items so the operations plan is not confused with the ADEQ checklist package.

Item	What to Confirm / Attach
Emergency equipment locations	Fire extinguisher locations, eyewash/shower, spill kits, first aid kit, PPE storage, alarm/phone locations.
Evacuation plan and assembly area	Confirm employee evacuation routes and designated assembly point.
Imminent/substantial endangerment contacts	Confirm agencies/persons to contact beyond 911, if applicable.
Air quality / other approvals	Attach permit, application, or written statement explaining why not required.
Certificate of disclosure / ownership documents	Attach ownership documentation and any required ADEQ administrative forms.
Equipment manufacturer documents	Attach Bondtech/autoclave specifications, O&M manual, training, testing, calibration, and shutdown instructions.
Drainage / containment details	Confirm floor drains to approved sanitary sewer/collection system or curbing/containment details.
Final map verification	Confirm all map exhibits are acceptable and replace with engineer/GIS-prepared versions if required.

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1. Facility Description and Location

Medical Waste Services, LLC owns and operates a biohazardous medical waste treatment, storage, and transfer facility at 3017 N Rockwell Ave, Casa Grande, Arizona 85122 (APN 509-81-119), within an I-2 General Industrial zoned area. The building includes office space in the front and waste receiving, handling, treatment, and storage areas in the rear, with sealed concrete floors throughout the processing area. The facility, parcel, and legal description are provided in Appendix A; site, vicinity, zoning, access, and floodplain maps are provided in Appendices B through F; and the facility layout / equipment location plan is provided in Appendix G.

We have an estimated target start date of 8-10-2026 and estimate we will have a annual volume of 600 tons per year to be processed.

Application Item 11 note. The completed ADEQ application form should identify the estimated date operations will begin under the requested plan approval and the estimated annual volume of biohazardous medical waste to be managed. These figures should be inserted in the application form and, if desired, repeated in this section before final submittal.

2. Purpose of Operation

The purpose of this facility is to receive regulated medical waste from approved generators, treat the waste by autoclave, and transport the treated waste to a permitted disposal facility in a manner that protects employees, the public, and the environment.

3. Acceptable Waste

The facility may accept biohazardous medical waste as defined in A.A.C. R18-13-1401.5(a) through (e), provided the waste is properly packaged and labeled in accordance with A.A.C. R18-13-1407 and is accompanied by a duly completed tracking document.

4. Unacceptable Waste

The facility shall not accept hazardous waste, radioactive waste, bulk chemotherapy waste, free liquids unsuitable for treatment, compressed gas cylinders or aerosol cans, mercury-containing devices, batteries, chemical waste (solvents, paints, formalin, acids, alcohols, waste oils), whole human remains, fetal remains, improperly packaged containers, or any other waste prohibited by federal, state, or local law from treatment at this facility. Any unacceptable waste discovered at the facility shall be isolated and managed until returned to the generator or otherwise lawfully disposed of.

5. Maximum Storage Time and Refrigerated Storage

Biohazardous medical waste shall be treated within 24 hours of receipt or refrigerated at 40°F or less upon determination that treatment will not occur within 24 hours (A.A.C. R18-13-1412.A.2.a). Total on-site storage shall not exceed 90 days. Putrescible waste shall be treated as soon as practicable. Refrigerated trailers, vehicles, or other approved refrigerated storage units may be used; stored waste shall be managed to prevent nuisance conditions, odors, unauthorized access, and exposure to wind, rain, precipitation, or animals/vectors.

6. Waste Acceptance Procedures

Each incoming load shall be accepted only if accompanied by the required tracking documentation. Biohazardous medical waste may be accepted from a transporter with a signed and duly completed tracking document (A.A.C. R18-13-1412.A.3) or from a generator if packaged as prescribed in A.A.C. R18-13-1407 and supplied with the signed tracking document as prescribed in A.A.C. R18-13-1406.A. Tracking documents shall be retained for at least one year.

Upon arrival, facility personnel shall unload waste in the designated receiving area and visually inspect containers for general condition, proper packaging, leaks, and obvious signs of non-conforming material. Containers that are damaged or leaking, improperly labeled, or otherwise unacceptable shall be (i) rejected and returned to the transporter (A.A.C. R18-13-1412.A.3.b.i), (ii) accepted and transferred directly from the transporting vehicle to the treatment unit (A.A.C. R18-13-1412.A.3.b.ii), or (iii) repackaged for storage (A.A.C. R18-13-1412.A.3.b.iii). Facility personnel are not required to open sealed packages to verify contents.

7. Radioactive Screening and Special Waste Handling

Incoming biohazardous medical waste shall be screened with a Geiger–Müller counter during the receiving process. Any reading distinguishable above site-specific background radiation levels shall trigger isolation and evaluation; the waste shall not be processed as routine biohazardous medical waste until cleared for treatment or otherwise managed in accordance with applicable state and federal radiation requirements. Hazardous chemicals, radioactive waste, and chemotherapy waste shall be handled only in accordance with applicable law and the facility's written management procedures.

Special waste categories under A.A.C. R18-13-1420. Animal waste, chemotherapy waste, and cultures and stocks shall not be accepted as routine general biohazardous medical waste unless the generator has identified the waste type in advance, facility management has confirmed that the waste is within the autoclave manufacturer's approved waste categories, and the waste is packaged, labeled, tracked, and treated in accordance with A.A.C. R18-13-1420 and other applicable requirements. Bulk chemotherapy waste, hazardous chemical waste, radioactive waste above background, and any special waste that is not compatible with the approved autoclave treatment process shall be rejected, returned to the generator, or directed to an authorized facility.

8. Non-Conforming Waste

Non-conforming waste discovered before treatment shall be segregated, and the generator shall be notified as soon as practical. Non-conforming waste shall be returned to the generator or sent to an authorized facility, depending on the type of waste and the lawful management option available.

9. Waste Loading and Treatment

Biohazardous medical waste is treated in a Bondtech model BTT6X13 horizontal autoclave (Drawing 10704-000D Rev 1; National Board No. 462; ASME Code Section VIII Div. 1 "U" Cert No. 10,264), 6-foot inside diameter, 13-foot length, 72-inch rapid-opening door, MAWP FV/75 psi at 500°F, equipped with a programmable cycle controller and chart recorder capable of continuous recording of date, time, process duration, temperature, and pressure for each cycle. Steam is supplied by a Hurst Boiler and Welding Co. Scotch Marine firetube boiler (Model S500-150-136; Serial No. 0850116; ASME Form P-2), 100 boiler horsepower, MAWP 150 psi, propane-fired.

The minimum operational temperature and minimum retention time for each treatment cycle are 295°F and 25 minutes, respectively, or 280°F and 30 minutes, respectively (A.A.C. R18-13-1412.A.7). The maximum throughput capacity at this facility is 1,500 pounds per hour. Waste shall be processed according to the manufacturer's specifications for the unit. Medical sharps shall be further treated as defined in A.A.C. R18-13-1419.3.

Treatment method applicability. The facility uses steam autoclave treatment and does not use incineration for biohazardous medical waste. The incineration requirements in A.A.C. R18-13-1412(A)(6) are not applicable because no medical waste is burned or reduced to ash at this facility.

The facility does not use an alternative medical waste treatment method separate from the Bondtech steam autoclave described in this plan. If Medical Waste Services, LLC proposes to use another treatment method in the future, the method will be evaluated for compliance with A.A.C. R18-13-1415(A) and any required ADEQ approval will be obtained before use.

After acceptance, waste shall be weighed and loaded into autoclave carts. Red bags are not opened during transfer and are not opened prior to treatment unless opening is required to properly treat the contents. At the end of each

cycle, treated waste is removed and transferred to the designated compactor or roll-off for disposal at a permitted sanitary landfill.

10. Container Washing

Reusable containers shall be washed and disinfected after being emptied using the automated container wash system (hot water and approved disinfectant). Clean containers shall be staged in a clean area of the facility or loaded onto transport vehicles for return to customers.

11. Storage Standards, Signage, and Biohazard Symbol

Biohazardous medical waste shall be stored in designated areas separate from other solid waste. The universal biohazard symbol shall be displayed on all biohazardous medical waste containers, storage areas, treatment areas, and any other area where the waste is received, handled, stored, or processed. Signage shall be clearly visible to employees, transporters, and other authorized personnel. Location and description of signage and biohazard symbol placement are maintained with the facility layout (Appendix G) and signage records (Appendix H).

12. Housekeeping and Daily Closing

At the end of each operating day, the facility shall be cleaned and secured. Daily housekeeping includes removal of loose waste and debris from the processing area, emptying trash and replacing liners, sweeping and cleaning the processing area, cleaning up standing water in wash areas, returning portable equipment to designated storage, confirming treated waste has been placed in the proper disposal container, securing refrigerated storage units, turning off non-essential equipment, and locking the building and gate.

13. Contingency Plan for Extended Equipment Outage

If treatment equipment is out of service for an extended period, incoming waste volumes shall be managed based on the capacity of the treatment equipment, including backlog, and waste shall be stored for less than 90 days. If the 90-day timeframe would be exceeded, the facility shall stop accepting waste until backlog is treated or contract with another authorized treatment facility for treatment of the waste. Backup treatment facilities or contractual contingency options are listed in Appendix I.

14. Emergency Preparedness and Response

The facility shall maintain emergency equipment in good working order, including fire extinguishers, eyewash/safety shower, biohazard spill kit, first aid supplies, water supply, and personal protective equipment. A designated emergency coordinator shall be available on site or on call at all times with authority to take appropriate action in the event of a fire, spill, equipment failure, injury, or other emergency. Employees shall notify management immediately and call 911 when necessary. Emergency coordinators, fire department, hospital, equipment locations, and the tiered notification protocol for imminent or substantial endangerment are provided in Appendix H.

15. Facility Shutdown Procedures

In the event of a planned or unplanned shutdown, receiving operations shall be suspended as necessary, and no additional waste shall be accepted unless adequate storage capacity and refrigeration are available. Waste already received shall be secured in designated storage areas and, if treatment will not occur within the established storage timeframe, shall be refrigerated at 40°F or less or transferred to an approved alternate treatment or disposal facility (Appendix I).

The autoclave and boiler shall be shut down in accordance with the manufacturer's operating procedures, including completion or safe termination of any active cycle, isolation of steam supply, shutdown of fuel and electrical

sources, depressurization, and lockout/tagout when required. Receiving doors, waste storage areas, treatment areas, and facility access points shall be closed, locked, and secured. Facility management shall document the shutdown and identify any untreated waste remaining onsite.

16. Spill Response

Spills of untreated biohazardous medical waste shall be contained, cleaned, and disinfected promptly. Employees shall secure the area, don PPE, contain the spill, collect contaminated materials, disinfect the affected area with an approved disinfectant, and package cleanup waste as regulated medical waste for treatment. Spills shall be documented in the operating record and reported in accordance with biohazardous medical waste transporter certification conditions.

17. Employee Training

Employees shall receive initial training before performing duties involving regulated medical waste and refresher training at least annually, or more often when procedures change. Training shall cover waste handling, PPE, spill response, exposure control, emergency response, equipment operation, and recordkeeping, and shall be appropriate to the employee's duties. Training records are maintained at 3017 N Rockwell Ave, Casa Grande, AZ 85122 by Victor DiVello or his designee.

18. Tracking, Recordkeeping, Maintenance, and Operational Performance

The facility shall comply with the recordkeeping requirements of A.A.C. R18-13-1411.6. An annual summary of all documents placed in the operating record shall be submitted to ADEQ, which supersedes Type II notification requirements of A.R.S. §49-762.06.A.2 (except biohazardous medical waste spills, which are reported separately).

Operational records — including waste inspection, tracking documents, waste storage records, daily operation performance records (cycle throughput, continuous temperature, pressure, and retention time for each treatment cycle, recorded by chart recorder or equivalent approved system), biological testing results, routine maintenance and equipment calibration records, personnel training records, and records of emergency responses such as fire, personnel injuries, spills, facility shutdown, malfunction, property damage, or flood damage — shall be retained in the facility file at 3017 N Rockwell Ave, Casa Grande, AZ 85122 for a minimum of three (3) years and made available to ADEQ on request.

19. Final Disposal

After treatment, waste shall be transferred to a compactor or covered roll-off container and transported to a permitted sanitary landfill or other authorized disposal facility. The facility typically uses Red Rocks Landfill (Waste Connections Inc.) or another permitted disposal facility (Appendix I). Treated waste shall be managed to prevent release, nuisance conditions, or unauthorized access before final disposal.

20. Design Criteria, Drainage, and Containment

The proper control of surface water drainage shall be implemented to prevent storm water from running onto and storm water from running off the facility area. Floors in the biohazardous medical waste receiving, treatment, container wash, and storage areas are sealed concrete, smooth, cleanable, non-porous, and impervious to liquids, and either have a curb of sufficient height to control spills or slope to a drain connected to an approved sanitary sewer system (A.A.C. R18-13-1412.A.4.b). At this facility, floor drains in the treatment and container wash areas discharge to the City of Casa Grande sanitary sewer collection system.

Wall and surface finish criteria. Walls, partitions, and fixed surfaces in biohazardous medical waste receiving, treatment, container wash, and storage areas shall be maintained as smooth, easily cleanable, non-porous surfaces that are impervious to liquids and resistant to corrosion by disinfecting agents and hot water. Acceptable

finishes include sealed masonry or concrete, fiber-reinforced plastic panels, coated metal panels, epoxy-coated surfaces, or equivalent washable and disinfectant-resistant materials. Final facility photographs, finish schedules, or plan notes should be attached to Appendix G if requested by ADEQ.

All effluent generated from waste processing and cleaning and sanitation of equipment, bins, or containers shall be disposed of in an approved wastewater disposal system. Floor drain inlets are protected with strainers, inspected daily, and kept clear of debris. No untreated regulated medical waste, free liquid biohazardous waste, sharps, or hazardous chemical waste is permitted to enter the drainage system. Where floor drains are not present, curbing, berms, spill pallets, or other containment measures shall be used to prevent liquids from leaving the waste handling area.

21. Protection from Water, Precipitation, Wind, and Animals

Biohazardous medical waste shall be stored in designated, covered, and secured areas that protect the waste from water, precipitation, wind, and animals (A.A.C. R18-13-1411.4). Containers shall remain closed except when waste is being added or removed. Outdoor storage, if any, shall be limited to approved, covered, leak-resistant containers or secured enclosures. The facility shall maintain perimeter fencing and physical barriers around working areas to prevent windblown litter, supplemented by routine policing as required by seasonal weather conditions.

Floodplain Demonstration. Per FEMA FIRM Panel 04021C1175E (effective December 4, 2007), the facility parcel (APN 509-81-119) is mapped within Zone X — Area of Minimal Flood Hazard. No part of the facility is within one-half mile of a 100-year floodplain with flows in excess of 25,000 cfs, and no exception analysis is required. See Appendix F.

Irrigation grandfathered rights. Before final submittal, the applicant shall confirm that no irrigation grandfathered right is appurtenant to all or any part of the facility parcel, or shall provide documentation showing that any such right has been retired or otherwise resolved through the Arizona Department of Water Resources. The final submittal should include the supporting ADWR/property documentation or a written not-applicable basis.

Appendix A – Facility, Parcel, and Legal Description

Item	Information
Facility Name	Medical Waste Services, LLC
Physical Location	3017 N Rockwell Ave, Casa Grande, AZ 85122
Mailing Address	3017 N Rockwell Ave, Casa Grande, AZ 85122
Owner / Operator / Authorized Agent	Victor DiVello, 3017 N Rockwell Ave, Casa Grande, AZ 85122, 602.305.8888
APN / Parcel ID	509-81-119
Township / Range / Section	Section 32, Township 5 South, Range 6 East
Legal Description	Lot 19, Donovan M. Kramer Senior Industrial Park at the Airport, Phase II & Parcel H, according to the plat recorded in Cabinet D, Slide 005, and thereafter Affidavit of Correction recorded in Fee No. 2001-030845, records of Pinal County, Arizona.

Note: Attach assessor records, deed/ownership documentation, or other official parcel support behind this appendix as needed.

Appendix B – Site Location / Parcel Map

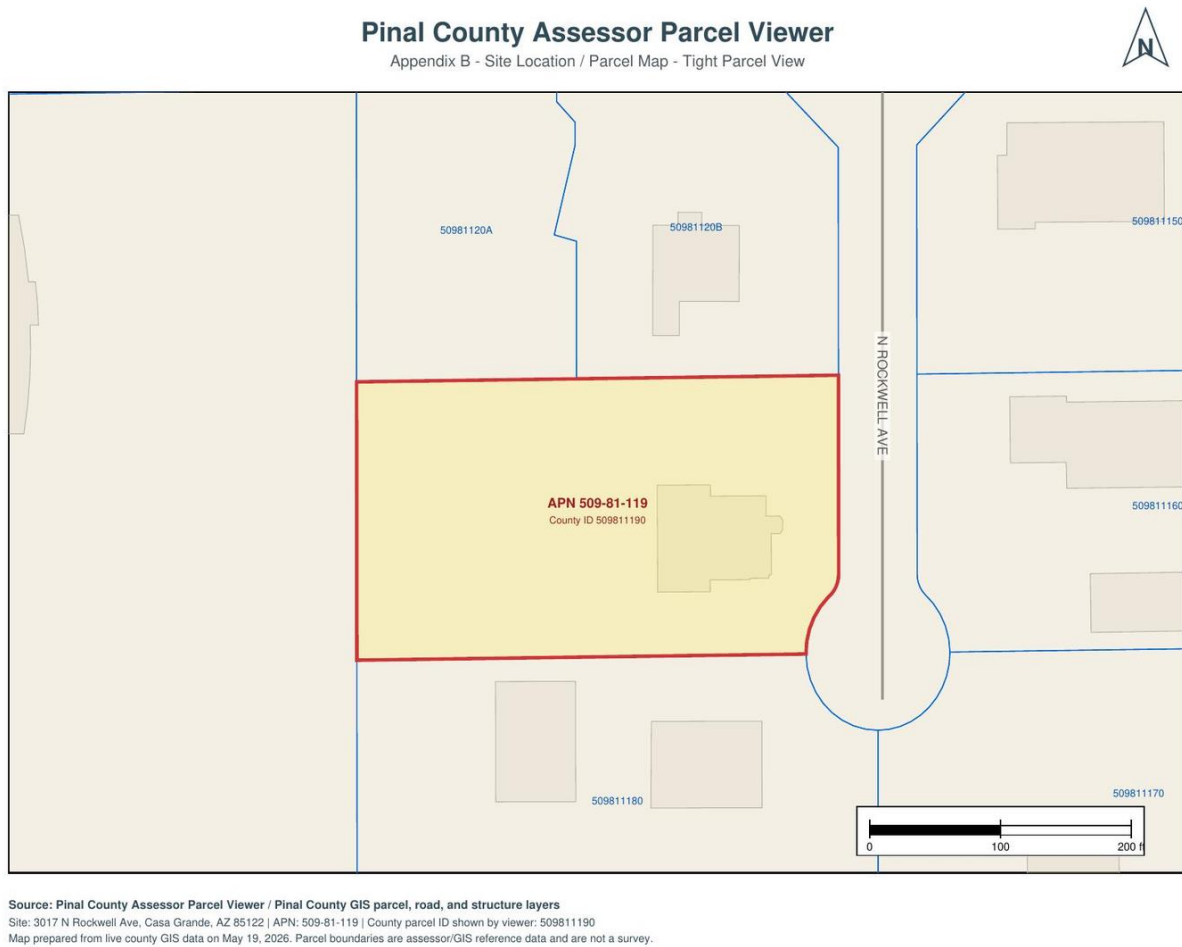


Figure B-1 – Site Location / Parcel Map (Pinal County Assessor, APN 509-81-119)

Appendix C – Aerial and Vicinity Map

Appendix C - Aerial / Vicinity Map
1-mile radius around 3017 N Rockwell Ave, Casa Grande, AZ 85122



Sources: USGS National Map - USGS Imagery Only; Pinal County GIS roads and parcel location
Prepared: May 19, 2026 | Facility: 3017 N Rockwell Ave, Casa Grande, AZ 85122 | APN: 509-81-119 | County parcel ID: 509811190
Radius: 1 mile (5,280 ft) from facility marker. Map is for vicinity/orientation purposes and is not a survey.
Approximate facility coordinate: 32.946621, -111.767259 (WGS84).

Figure C-1 – Aerial / Vicinity Map, one-mile radius around the facility

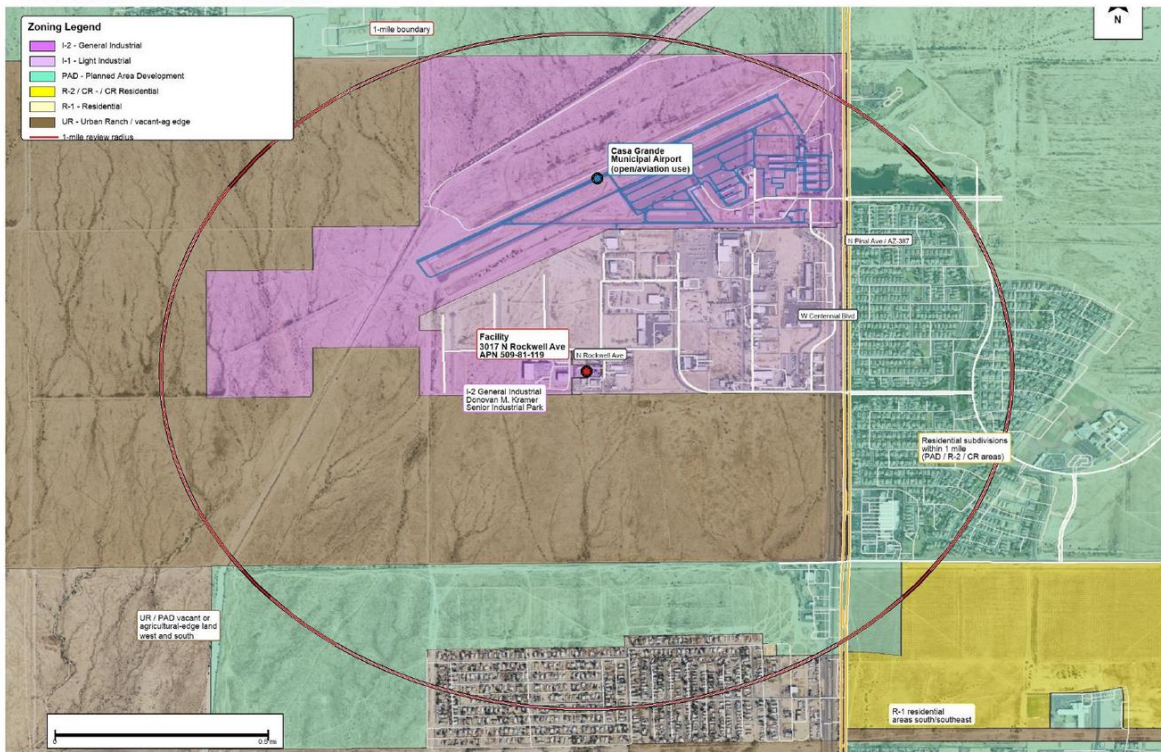
Appendix D – Adjacent Zoning and Land Use Map

Appendix D - Adjacent Zoning / Land Use Map

Facility marked with 1-mile radius, official zoning categories, and nearby residential areas identified.

Appendix D - Adjacent Zoning / Land Use Map

1-mile radius around 3017 N Rockwell Ave, Casa Grande, AZ



Sources: City of Casa Grande Planning/Zoning GIS, USGS National Map Imagery, OpenStreetMap road/network. Generated May 15, 2008.

Figure D-1 – Adjacent Zoning and Land Use Map (one-mile, residences identified)

Appendix E – Access Roads, Bridges, and Railroads Map

Appendix E - Access Roads, Bridges, and Railroads

Overview map showing primary truck route from I-10/Pinal interchange, nearby railroad, airport, scale, north arrow, and crossing note.

Appendix E - Access Roads, Bridges, and Railroads

Overview: I-10 Exit 185 to 3017 N Rockwell Ave, Casa Grande, AZ

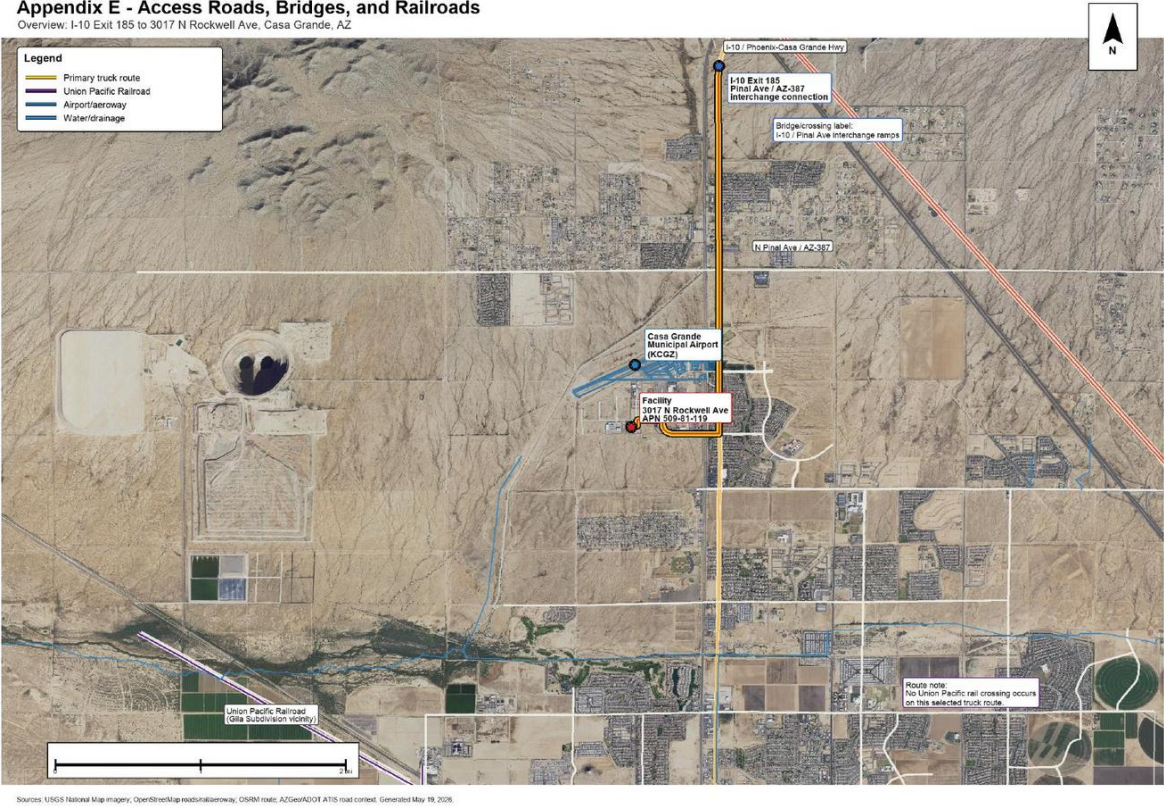
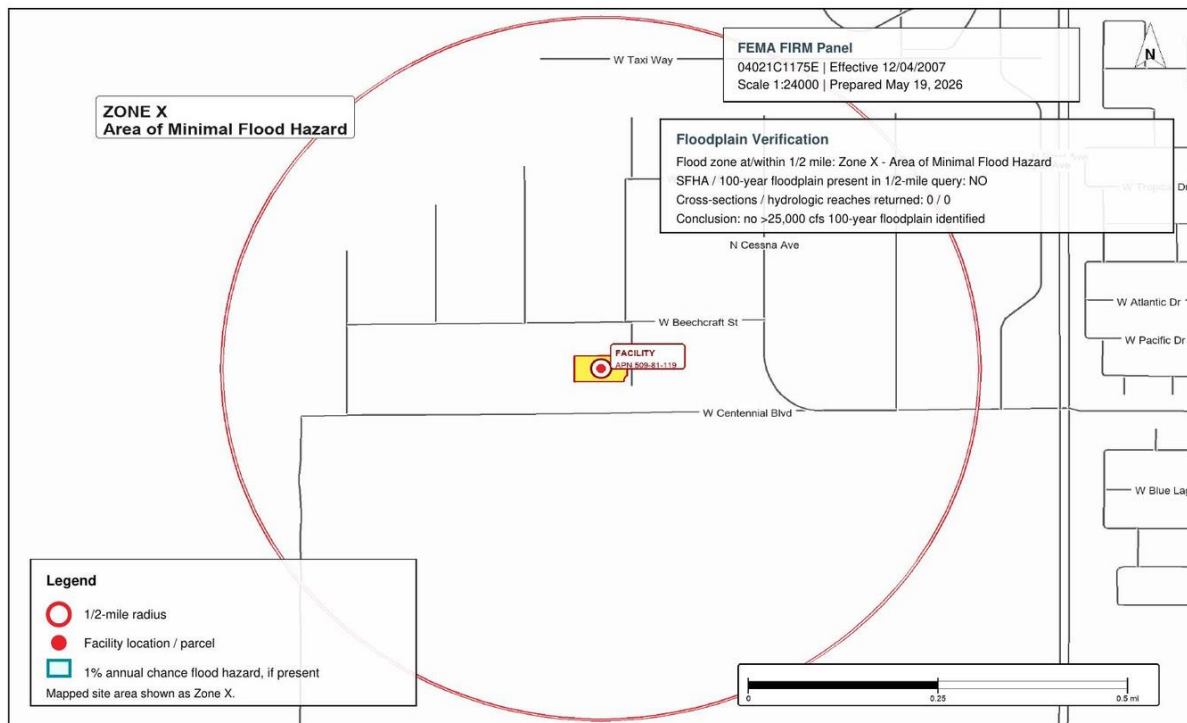


Figure E-1 – Access Roads, Bridges, and Railroads Map

Appendix F – Floodplain Map

Appendix F - Floodplain Map

FEMA NFHL / FIRMette-style map, 1/2-mile radius around 3017 N Rockwell Ave, Casa Grande, AZ 85122



Sources: FEMA National Flood Hazard Layer / FIRMette map service; Pinal County GIS parcel and roads

Prepared: May 19, 2026 | Facility: 3017 N Rockwell Ave, Casa Grande, AZ 85122 | APN: 509-81-119 | County parcel ID: 509811190

FEMA panel: 04021C1175E; effective date: 12/04/2007. Facility coordinate: 32.946621, -111.767259 (WGS84).

Verification result: FEMA NFHL query for the 1/2-mile vicinity returned Zone X / Area of Minimal Flood Hazard only; no SFHA floodplain features were returned.

Plan note: Because no 100-year floodplain/SFHA feature was identified within 1/2 mile, no floodplain with flows greater than 25,000 cfs was identified in this vicinity.

Map is for planning/documentation use and is not a survey or a lender flood determination.

Figure F-1 – FEMA FIRMette-style Floodplain Map (one-half-mile radius)

Floodplain Demonstration. Based on FEMA National Flood Hazard Layer data and FEMA FIRM Panel 04021C1175E (effective December 4, 2007, scale 1:24,000), the facility parcel is mapped within Zone X — Area of Minimal Flood Hazard. A query of the NFHL for the area within one-half mile of the facility returned no Special Flood Hazard Area features and no cross-sections or hydrologic reaches indicative of a regulated floodplain. Accordingly, no part of the facility is within one-half mile of a 100-year floodplain with flows in excess of 25,000 cfs, and no further floodplain demonstration or exception analysis is required. The FIRMette-style verification map prepared by the applicant on May 19, 2026 is included behind this appendix.

Appendix G – Facility Layout / Equipment Location Plan

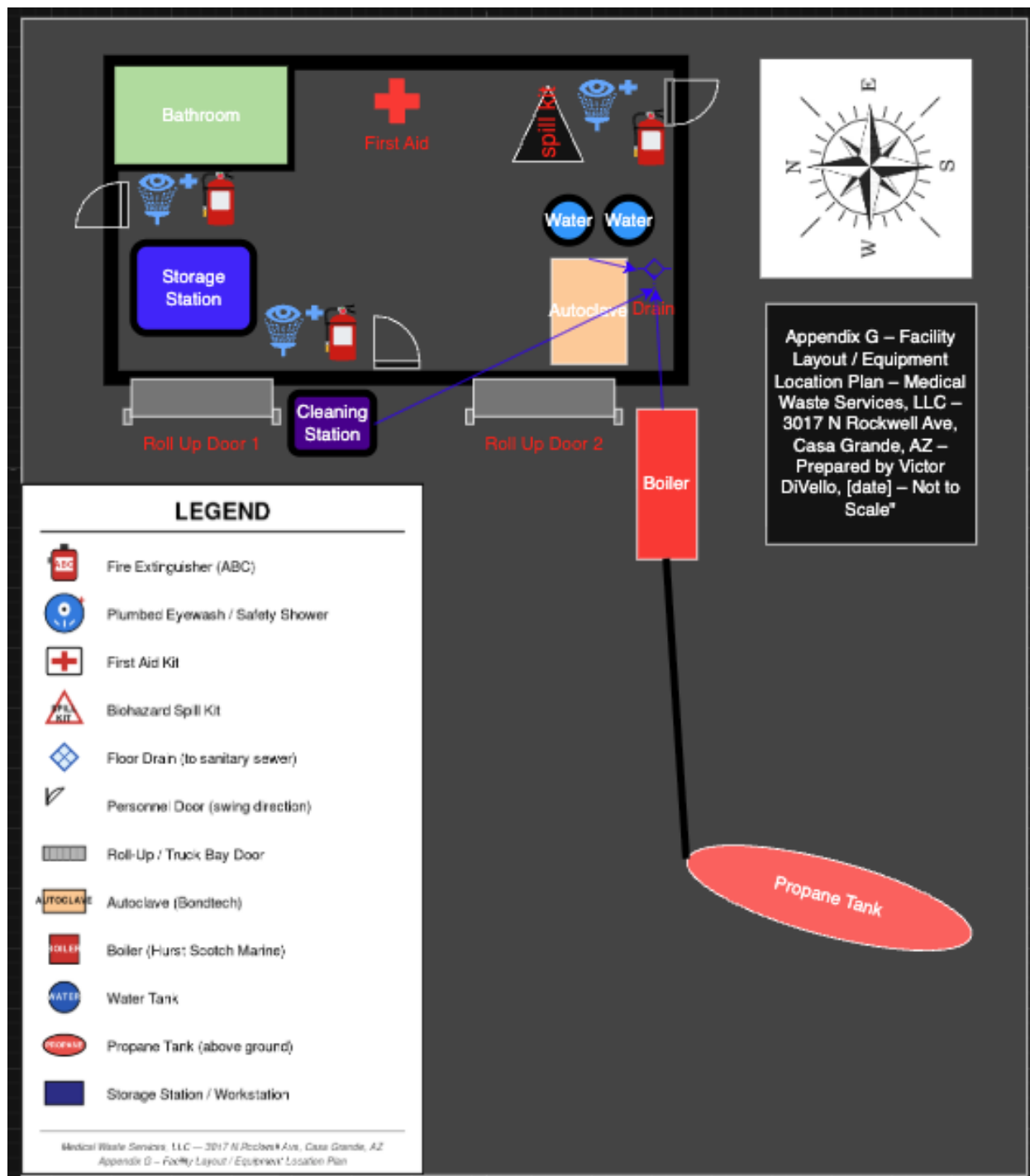


Figure G-1 – Facility Layout / Equipment Location Plan

Appendix H – Emergency Contacts and Equipment Locations

Item	Information / Location
Primary Emergency Coordinator	Victor DiVello, 3017 N Rockwell Ave, Casa Grande, AZ 85122, 480.226.9211
Alternate Emergency Coordinator	Victor DiVello Jr., 3017 N Rockwell Ave, Casa Grande, AZ 85122, 719.330.0332
Nearest Fire Department	Casa Grande Fire Station 503, 420 W Rodeo Road, approximately 6 minutes away.
Ambulance / Emergency Medical Response	Casa Grande Fire / local emergency medical response; call 911.
Nearest Hospital / Medical Resource	Casa Grande Fire, 1637 E McCartney Rd, Casa Grande, AZ 85122, approximately 9 minutes away. Confirm nearest hospital/emergency room before submittal.
Emergency Equipment Locations	<p>Fire Extinguishers (ABC Dry Chemical): Four (4) units total, one (1) mounted near the exit/entry of each primary area — front office, receiving bay, treatment area (adjacent to the autoclave), and waste storage area. Units sized, mounted, and inspected annually in accordance with NFPA 10 and the Arizona Fire Code.</p> <p>Eyewash / Safety Shower: One (1) plumbed combination eyewash/safety shower located in the treatment area, within 10 seconds / approximately 55 feet of the autoclave, container wash, and receiving zones, in accordance with ANSI Z358.1. Activated and flushed weekly; inspected annually.</p> <p>Biohazard Spill Kit: One (1) spill kit stored in the treatment area near the autoclave. Contents include absorbent material, disinfectant, red biohazard bags, a sharps container, nitrile gloves, eye protection, and a disposable gown. Restocked after each use.</p> <p>First Aid Kit: Wall-mounted ANSI Z308.1-compliant first aid cabinet located adjacent to the PPE storage cabinet near the entry to the treatment area.</p> <p>PPE Storage: Dedicated PPE cabinet located near the entry to the treatment area, stocked with nitrile gloves, fluid-resistant gowns, face shields/safety glasses, N95 respirators, and chemical-resistant gloves and aprons for container washing operations.</p> <p>Alarms / Phones / Communication: Manual fire alarm pull stations located at each exterior exit. A landline telephone is maintained in the front office; all employees additionally carry mobile phones. The site address (3017 N Rockwell Ave, Casa Grande, AZ 85122) is posted near each phone for use by emergency callers.</p> <p>Utility Shutoffs: Main electrical disconnect, steam supply isolation valve, water supply shutoff, and propane shutoff are clearly labeled and accessible. Locations are shown on the Facility Layout / Equipment Location Plan (Appendix G).</p>
Evacuation Plan / Assembly Area	Upon activation of the fire alarm or other evacuation order, all employees shall immediately stop work,

	<p>secure waste containers if it is safe to do so (close lids; do not interrupt an active autoclave cycle — the unit is designed to fail safely), and exit the building using the nearest available exit. The treatment building has at least three (3) exterior egress doors, and all interior areas have at least two exit paths so that no employee is required to pass through a fire or hazard zone to evacuate. Posted “Evacuation Route” diagrams in each work area indicate the primary and secondary route from that location.</p> <p>Designated Assembly Area: The exterior assembly point is the front parking lot at the northwest corner of the building, at a safe distance from the structure, propane tank, and emergency vehicle access drives. The assembly area is shown on the Facility Layout / Equipment Location Plan (Appendix G).</p> <p>Headcount and Accountability: The Emergency Coordinator (or the Alternate Emergency Coordinator if the primary is unavailable) shall conduct a headcount at the assembly area against the current employee roster and any visitor sign-in log. Missing personnel shall be reported immediately to responding fire department personnel. No employee shall re-enter the building until it is declared safe to do so by the Emergency Coordinator and, if responding, the fire department.</p> <p>Evacuation Drills: A full evacuation drill shall be conducted at least once per year, documented in the facility training records, and reviewed by the Emergency Coordinator to identify and correct any deficiencies in routes, signage, or employee response.</p>
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Place emergency equipment map or marked facility plan behind this appendix when available.

Imminent or Substantial Endangerment Notification

In the event of a fire, hazardous material release, large-scale spill of regulated medical waste, employee fatality or serious injury, criminal act, or any other incident that may constitute an imminent or substantial endangerment to public health, worker safety, or the environment, the Emergency Coordinator shall implement the tiered notification protocol below and document all calls in the facility incident log. Where uncertainty exists as to whether an event is reportable, the Emergency Coordinator shall err on the side of notification. All telephone numbers shall be verified annually and immediately prior to plan submittal.

Tier 1 — Immediate (within 15 minutes): Dial 911 for fire, medical, hazardous release, or law enforcement response. Notify the Primary Emergency Coordinator (Victor DiVello, 480.226.9211). If the Primary is unavailable, notify the Alternate Emergency Coordinator (Victor DiVello Jr., 719.330.0332). Begin the facility incident log.

Tier 2 — Within One (1) Hour (agency notification, as applicable to the incident):

Agency	Contact (verify before submittal)	When to Call
ADEQ 24-Hour Emergency Response Line	(602) 771-2330 / 1-800-234-5677 (in-state)	Any release of regulated medical waste, hazardous substance, or pollutant; fire involving waste; threat to public health or environment.
ADEQ Waste Programs Division (Medical Waste Section)	(602) 771-2300; 1110 W Washington St, Phoenix, AZ 85007	Non-emergency program contact; written incident follow-up to the medical waste regulator.

Pinal County Environmental Health Services	(520) 866-7300; 31 N Pinal St, Florence, AZ 85132	Off-site impact to public health, water, or sanitary sewer; vector or odor complaints.
Pinal County Air Quality Control District	(520) 866-6929; 31 N Pinal St, Florence, AZ 85132	Visible smoke or odor release; boiler/burner upset condition with off-site air impact.
Arizona Bureau of Radiation Control (ADHS)	(602) 255-4845; 4814 S 40th St, Phoenix, AZ 85040	Any waste reading above background on the facility Geiger counter that cannot be returned to the generator.
National Response Center (NRC)	1-800-424-8802	Any CERCLA/EPCRA reportable release at or above a federal reportable quantity (e.g., spills involving propane, fuel, or chemical decon agents above RQ).
Arizona Division of Occupational Safety & Health (ADOSH)	(602) 542-5795 / (855) 268-5251 reporting line	Within 8 hours of any work-related fatality; within 24 hours of an inpatient hospitalization, amputation, or loss of an eye.
Arizona Poison & Drug Information Center	1-800-222-1222	Suspected employee exposure or ingestion of chemical disinfectant or decon agent.

Tier 3 — Within Twenty-Four (24) Hours / Follow-Up: Submit written incident reports to ADEQ and any other notified agency in accordance with the applicable rule. Notify the facility's insurance carrier. If the incident involved a specific shipment, notify the generator and transporter. Update the facility incident log with all calls placed, times, names, and case/reference numbers received. Conduct a post-incident review with the Emergency Coordinator and operations staff to identify root cause and any corrective actions; document the review and any plan revisions in the facility records.

Appendix I – Backup Treatment and Disposal Facilities

Facility / Function	Address	Notes
Backup Treatment Facility	Integrity Medical Waste Inc, 601 N 11 Mile Corner Rd, Eloy AZ 85223	See attached Document
Final Disposal Facility	Red Rocks Landfill, 22316 Harmon Rd, Florence, AZ 85132	See attached Approved Profile

Appendix J – Attachments Still Needed / ADEQ Submittal Checklist

This appendix provides a working cross-reference between the ADEQ Biohazardous Medical Waste Facility Plan checklist/application items and the current operations plan. It also identifies attachments that still need to be inserted or confirmed before final submittal.

- Signed transmittal letter on company letterhead.
- Owner, operator, and authorized agent information sheet.
- Assessor parcel information, deed/ownership documentation, legal description, and APN support.
- Final site location map, aerial map, vicinity map, zoning/land use map, access/roads/rail map, and floodplain map.
- Certificate of disclosure or written acknowledgement that it is not required.
- Air permit or other environmental approvals, permit applications, or statement explaining why not required.
- Bondtech or other autoclave manufacturer specifications, O&M manual, shutdown procedures, maintenance/calibration instructions, training manual, and certification.
- Floor plan / site plan showing treatment, disposal, storage, transfer areas, major equipment, drains, traffic routing, inspection areas, cleanup areas, parking, utilities, and facility boundaries.
- Drainage / plumbing / sewer connection or spill containment detail.
- Emergency contacts, emergency equipment locations, and evacuation plan.
- Backup treatment agreement or other contractual contingency documentation, if available.
- Recordkeeping method/location and responsible person confirmation.

ADEQ Checklist Cross-Reference Matrix

ADEQ item	Where addressed	Remaining action
Transmittal letter	Drafted separately as ADEQ_Transmittal_Letter_DRAFT.docx	Needs signature/date on company letterhead or final letter.
Completed ADEQ application form	Application form / plan Sections 1, Appendix A, Appendix L	Complete checkboxes, fee option, lat/long, certification, and signature.
Table of contents	Plan Table of Contents; Appendix J matrix	Cross-reference matrix added in REV1.
General facility information	Sections 1-2; Appendix A	Add estimated start date and annual waste volume when confirmed.
Facility maps	Appendices B-G; Appendix M	Replace any draft/status maps with final dated maps before submittal.
Location restrictions	Section 21; Appendix F; Appendix J	Floodplain addressed; irrigation rights require ADWR/property support.
Administrative determinations	Appendix L; Appendix J	Attach deed, lease/owner authorization if needed, and final Certificate of Disclosure.
Other approvals/demonstrations	Appendix K; Appendix J	Attach air/no-permit support, sewer/wastewater support, boiler certificates, and any local approvals.
Storage/transfer/treatment operating criteria	Sections 5-13; Sections 18-19	Core operating language covered.
Treatment equipment documentation	Section 9; Appendix N	Attach Bondtech manual/specs/certification, calibration/testing, and training materials.
Emergency/contingency plan	Sections 13-16; Appendix H; Appendix I	Verify emergency contacts, hospital/ambulance details, equipment map, and backup agreements.
Special waste and Geiger screening	Sections 4, 7, 8; REV1 Section 7 language	REV1 adds explicit R18-13-1420 special-waste handling language.
Autoclave/incineration/alternative method applicability	Section 9; Appendix N	REV1 adds no-incineration and no-alternative-treatment statements.
Records and operational performance	Section 18; Appendix N	Covered; ensure sample logs/forms are attached if available.
Design criteria	Sections 20-21; Appendix G; Appendix M	REV1 adds wall/surface finish criteria; final drawing/details still needed.

Outside Documents Still Needed From Applicant

- Completed and signed ADEQ application form, including fee option and certification signature.
- Final signed transmittal letter.
- Autoclave manufacturer manual, specifications, operating procedures, maintenance/testing/calibration instructions, training materials, and written treatment-capability certification.
- Boiler operator manual and current inspection certificate(s), if applicable.

- Zoning compliance evidence from the City of Casa Grande, Pinal County, or other applicable jurisdiction.
- Deed plus lease, contract, or owner authorization for Medical Waste Services, LLC to operate on the parcel, if ADEQ requires it.
- Final Certificate of Disclosure or written acknowledgement that disclosure is not required.
- Final maps and facility layout/site plan with date, source/preparer, scale or scale notation, north arrow, and required labels.
- ADWR/property support for irrigation grandfathered rights.
- Written support for air/no-air-permit determination, wastewater/sewer connection, backup treatment arrangements, and any other local/environmental approvals.
- Confirmed estimated operating start date and estimated annual volume of biohazardous medical waste managed.

Appendix K – Air Quality / Emissions Source Determination

This appendix is provided in response to the ADEQ checklist item requesting either an air quality permit, a permit application, or a written statement explaining why an air quality permit is not required for the facility. Medical Waste Services, LLC operates a single combustion source (a propane-fired boiler) serving the autoclave; no other regulated air emission sources are present at the facility. The basis for the conclusion that an individual air quality permit from the Pinal County Air Quality Control District (PACQCD) is not required is set forth below. The supporting Hurst Boiler ASME Form P-2 Manufacturer's Data Report is included as an attachment to this appendix.

Emission Source Inventory

Item	Description
Equipment	Hurst Boiler and Welding Company Scotch Marine firetube boiler, Model S500-150-136, Serial No. 0850116, Drawing No. 14,362, year built 2008.
Rated Capacity	100 boiler horsepower; maximum designed steaming capacity 3,450 lb/hr; heating surface 500 sq ft; MAWP 150 psi; ASME Code Section I (2007 Addenda).
Estimated Heat Input	Approximately 4.2 MMBtu/hr at rated capacity (100 BHP × 33,475 Btu/hr/BHP ÷ 80% efficiency).
Fuel	Liquefied petroleum gas (propane) only, supplied from a dedicated on-site propane storage tank. No fuel oil, coal, biomass, or other fuel is fired in this unit.
Operating Pattern	Intermittent operation in support of the autoclave treatment cycle only; not operated as a continuous process boiler. Annual run hours expected to remain well below 8,760 hours.
Other Emission Sources	None. The on-site propane storage tank is a passive fuel storage vessel and is not a combustion source. The autoclave itself vents condensed water vapor and is not a regulated air emission source. No standby generator, paint booth, solvent process, fuel-dispensing operation, or other combustion equipment is present at the facility.

Basis for Conclusion that an Air Quality Permit Is Not Required

1. Small Source Below PCAQCD Permit Thresholds. The boiler is a small (100 BHP, approximately 4.2 MMBtu/hr) propane-fired unit. Under the Pinal County Air Quality Control District rules and applicable Arizona Administrative Code provisions governing minor source permitting, gaseous-fuel combustion units of this size operating on a clean fuel are generally below the applicability thresholds for an individual Class II permit and typically qualify for treatment as an insignificant or trivial activity, a permit exemption, or a general permit/registration, depending on the specific PCAQCD program in effect at the time of operation.

2. Estimated Potential Emissions Below Major and Minor Source Thresholds. Using AP-42 emission factors for external combustion of liquefied petroleum gas and assuming worst-case continuous operation at rated heat input (4.2 MMBtu/hr × 8,760 hr/yr = 36,792 MMBtu/yr), the unit's potential-to-emit is conservatively estimated as: NO_x ≈ 2.6 tons/yr; CO ≈ 1.5 tons/yr; PM/PM₁₀ ≈ 0.1 tons/yr; SO₂ ≈ 0.01 tons/yr; VOC ≈ 0.1 tons/yr. All values are well below the Title V major source threshold (100 tons/yr) and the Class II minor source threshold (general 100 tons/yr / 10 tons/yr HAP cap) and well below PSD significance levels. Actual emissions are expected to be a small fraction of potential emissions because the boiler operates intermittently in support of autoclave cycles.

3. Clean Fuel (Propane). Propane is a clean-burning gaseous fuel with very low sulfur and particulate emission factors and is not subject to fuel-sulfur or fuel-quality standards that would apply to fuel oils. No alternate fuel is fired in the unit.

4. No Hazardous Air Pollutant (HAP) Source. The boiler is not subject to 40 CFR Part 63 Subpart DDDDD (Industrial, Commercial, and Institutional Boilers and Process Heaters, Major Source) because the facility is not a major source of HAPs. Subpart JJJJJ (Area Source ICI Boilers) does not apply to gaseous-fuel-fired boilers, which are excluded from the rule's applicability.

5. NSPS Applicability. The boiler's heat input rating (approximately 4.2 MMBtu/hr) is below the 10 MMBtu/hr applicability threshold of 40 CFR Part 60 Subpart Dc (Small Industrial-Commercial-Institutional Steam Generating Units), so Subpart Dc does not apply. Larger NSPS standards (Subparts D, Db) likewise do not apply.

6. Autoclave Emissions. The autoclave itself is a closed pressure vessel and is not a regulated air emission source. The cycle releases primarily condensed water vapor at the end of treatment; no combustion or chemical reaction product is exhausted to atmosphere.

Facility Commitment

Based on the foregoing analysis, Medical Waste Services, LLC concludes that the boiler does not require an individual air quality permit from the Pinal County Air Quality Control District. The facility will re-evaluate air quality applicability if any new combustion source (e.g., a backup generator), additional boiler capacity, or other regulated process is added in the future, and will obtain any required authorization before such equipment is placed in service.

Supporting Attachment

Hurst Boiler and Welding Company ASME Form P-2 Manufacturer's Data Report for the boiler (Serial No. 0850116) is attached behind this appendix.

Appendix L – Ownership Documentation and Certificate of Disclosure

This appendix provides ownership documentation for the legal entity that owns and operates the facility, together with a Certificate of Disclosure executed by the Manager. The supporting Arizona Corporation Commission filings are attached behind this appendix.

Entity Information

Item	Information
Current Legal Entity Name	Medical Waste Services, LLC
Entity Type / Jurisdiction	Manager-Managed Limited Liability Company, organized under the laws of the State of Arizona.
Arizona Corporation Commission File No.	L15306467
Original Formation Date	June 4, 2009 (Articles of Organization filed with the Arizona Corporation Commission).
Prior Entity Names (chain of name changes)	(1) Advanced Automotive and 4x4, L.L.C. (original name on formation, June 4, 2009); (2) Arizona Medical Waste, L.L.C. (renamed by Articles of Amendment, September 2011, with publication completed in The Record Reporter on September 21, 23, and 26, 2011); (3) Medical Waste Services, LLC (renamed by Articles of Amendment signed August 31, 2015, filed September 2, 2015 — current legal name).
Management Structure	Manager-managed. Victor DiVello, Manager.
Statutory Agent	Victor DiVello (originally appointed at formation). Confirm current statutory agent appointment and address with the Arizona Corporation Commission prior to submittal.
Operating Facility	3017 N Rockwell Ave, Casa Grande, AZ 85122 (APN 509-81-119). See Appendix A for full parcel and legal description.
Real Property Ownership	The real property at 3017 N Rockwell Ave, Casa Grande, AZ 85122 (APN 509-81-119; Lot 19, Donovan M. Kramer Senior Industrial Park at the Airport, Phase II & Parcel H) is owned of record by Victor DiVello, an unmarried man, pursuant to Warranty Deed from BCT Holdings, LLC, an Arizona limited liability company, electronically recorded with the Pinal County Recorder on May 21, 2024 at Fee No. 2024-038172 (Escrow No. ST64240138). Mr. DiVello is also the Manager of the applicant, Medical Waste Services, LLC, and operates the facility on the property through that entity. A copy of the recorded Warranty Deed is attached behind this appendix.

Certificate of Disclosure

The undersigned, as Manager of Medical Waste Services, LLC (Arizona Corporation Commission File No. L15306467), in support of the operations plan submitted to the Arizona Department of Environmental Quality for the biohazardous medical waste treatment facility located at 3017 N Rockwell Ave, Casa Grande, Arizona 85122, hereby certifies, under penalty of perjury under the laws of the State of Arizona, the following:

- No person who is or who is proposed to be a manager, member, partner, principal, officer, director, trustee, agent, or other person in a controlling capacity of the applicant has, within the past five (5) years, been convicted of a felony involving moral turpitude or a felony involving the unlawful generation, transportation, storage, treatment, or disposal of hazardous waste, solid waste, biohazardous medical waste, or any other regulated material.
- No such person has, within the past five (5) years, been the subject of an environmental enforcement action that resulted in revocation, suspension, or denial of an environmental permit, license, or authorization at any facility owned or operated by them, in Arizona or any other jurisdiction.

- No such person is currently the subject of any pending criminal proceeding, civil enforcement action, or administrative enforcement action by any federal, state, or local environmental, health, or safety agency that would be material to the suitability of the applicant to operate a biohazardous medical waste treatment facility.
- The applicant is in good standing with the Arizona Corporation Commission and is authorized to transact business in the State of Arizona.
- The applicant will promptly notify the Arizona Department of Environmental Quality, in writing, of any change in the information set forth above that occurs after the submittal of this operations plan.

Signature: _____

Printed Name: Victor DiVello

Title: Manager, Medical Waste Services, LLC

Date: _____

Supporting Attachments

- Articles of Organization filed June 4, 2009, forming the entity originally named “Advanced Automotive and 4x4, L.L.C.” (ACC File No. L15306467).
- Articles of Amendment, September 2011, renaming the entity to “Arizona Medical Waste, L.L.C.”, together with the Affidavit of Publication from The Record Reporter (publication dates September 21, 23, and 26, 2011; RR# 2177385).
- Articles of Amendment signed August 31, 2015 and filed September 2, 2015, renaming the entity to its current legal name, “Medical Waste Services, LLC.”
- Pinal County Assessor parcel record for APN 509-81-119 (3017 N Rockwell Ave, Casa Grande, AZ 85122) — see Appendix A and Appendix B.
- Recorded Warranty Deed conveying APN 509-81-119 from BCT Holdings, LLC to Victor DiVello, an unmarried man, recorded with the Pinal County Recorder on May 21, 2024 at Fee No. 2024-038172 (Escrow No. ST64240138).

Applicant action items prior to submittal: (1) sign and date the Certificate of Disclosure above before a notary if required by the ADEQ form; (2) confirm with ADEQ whether the agency’s current Certificate of Disclosure form must be used in lieu of the certification language above and, if so, complete that form and substitute it here.

Appendix M – Map Verification Status Sheet

This appendix tracks the status of each map exhibit required by the ADEQ operations plan submittal and identifies the source, preparer, and verification step for each. Maps included in the final submittal package shall replace any placeholder or exhibit-only figure currently shown in Appendices B through G. The applicant intends to prepare these maps in-house using publicly available GIS and aerial sources, and to have an engineer or GIS professional review the final set before submittal if required by ADEQ.

Appendix / Map	What ADEQ Expects	Source / Preparer	Status
Appendix B — Site Location / Parcel Map	Parcel map showing the facility boundary, APN, dimensions, and adjacent street rights-of-way.	Pinal County Assessor Parcel Viewer (parcels.pinalcountyz.gov). Use APN 509-81-119; export a clean print with north arrow and scale.	Draft on file (assessor view) — refresh for submittal.
Appendix C — Aerial / Vicinity Map (one-mile radius)	Recent aerial image with the facility marked and a one-mile radius circle showing surrounding development.	Google Earth Pro (free desktop) or USGS National Map (apps.nationalmap.gov). Drop a one-mile radius ring centered on 3017 N Rockwell Ave.	To be prepared by applicant.
Appendix D — Adjacent Zoning / Land Use (one-mile, residences identified)	Zoning/land-use map within one mile of the facility, with residences identified.	Pinal County GIS Viewer (gisapps.pinalcountyz.gov) zoning layer, plus City of Casa Grande Planning & Zoning if any portion lies within the City limits.	To be prepared by applicant.
Appendix E — Access Roads, Bridges, and Railroads	Map showing access roads to the facility, any bridges/crossings on the route, and the nearest railroad.	Google Earth Pro screenshot plus AZDOT Transportation Data Management System (tdms.azdot.gov) for state route classifications; identify the Union Pacific rail line along Maricopa-Casa Grande Highway as the nearest railroad.	To be prepared by applicant.
Appendix F — Floodplain Map (one-half-mile radius)	FEMA-based map showing the 100-year floodplain within one-half mile, plus a floodplain demonstration statement.	FEMA Map Service Center (msc.fema.gov) — pull the current FIRMette for the parcel; cross-check with Pinal County Flood Control District (pinal.gov/flood) for local floodplain data.	To be prepared by applicant.
Appendix G — Facility Layout / Equipment Location Plan	Interior floor plan, dimensioned (or with scale notation), labeled with all major equipment, drains, exits, emergency equipment, evacuation routes, assembly point, and waste flow.	Prepared in-house by the applicant using draw.io / diagrams.net or equivalent. Required elements listed in the Floor Plan Content Checklist below.	To be prepared by applicant.

Floor Plan Content Checklist (Appendix G)

The Appendix G floor plan shall clearly identify and label each of the following:

- Building outline with overall dimensions; north arrow; scale notation (or “not to scale” if a sketch).
- All exterior exit doors (minimum three) and any roll-up/truck bay doors.
- Interior rooms/areas labeled: Front Office; Waste Receiving Bay; Treatment Area (autoclave); Boiler Room; Container Wash Area; Waste Storage Area; Clean Container Staging Area; Refrigerated Storage location (interior holding area or exterior trailer position).
- Major equipment located and labeled: Bondtech autoclave (Drawing 10704); Hurst Scotch Marine boiler (Model S500-150-136); propane tank; reverse osmosis (RO) water system; water tanks; piping risers; container wash system; waste compactor or roll-off; forklifts staging/charging area; office HVAC and electrical panels.

- All floor drains and trench drains, with arrows indicating flow direction to the sanitary sewer connection point.
- Emergency equipment per Appendix H: four (4) ABC fire extinguishers; plumbed eyewash/safety shower; biohazard spill kit; first aid kit; PPE storage cabinet; fire alarm pull stations at each exterior exit; landline telephone in the front office; main electrical disconnect; steam supply isolation valve; water shutoff; propane shutoff.
- Evacuation route arrows from each work area to the nearest exterior exit, and the exterior assembly point (front parking lot, northwest corner) clearly marked.
- Waste flow arrows showing the path from receiving → weighing → staging → autoclave loading → treated-waste discharge → compactor/roll-off.
- Site/exterior features adjacent to the building: parking, truck staging, propane tank location and clear-zone, driveway entrance/exit, fence line and gate location, and the designated exterior assembly area.

Final Map Verification Statement

Prior to ADEQ submittal, the applicant will (a) prepare each map listed above using the indicated source, (b) review all map exhibits for accuracy against on-site conditions, and (c) replace any exhibit-only or placeholder figures currently shown in Appendices B through G with the finalized versions. The applicant will also confirm with ADEQ at the pre-submittal stage whether any specific map exhibit requires preparation or stamping by a licensed engineer, surveyor, or GIS professional, and will engage such a professional if required.

Action items prior to submittal: (1) prepare each map in Appendices B through F using the sources noted above; (2) prepare the facility floor plan for Appendix G using the content checklist; (3) refresh the assessor parcel map in Appendix B; (4) confirm floodplain status against the current FEMA FIRMe and complete the floodplain demonstration in Appendix F; (5) verify that all maps include a north arrow, scale or scale notation, date, and preparer; (6) place final maps behind their respective appendix tabs.

Appendix N – Autoclave Standard Operating Procedures

This appendix sets out the written standard operating procedures (SOPs) for safe and effective operation of the Bondtech autoclave and the supporting Hurst Scotch Marine steam boiler at the Medical Waste Services, LLC treatment facility. These SOPs supplement, and shall be read together with, the operations plan Sections 9 (Waste Loading and Treatment), 15 (Facility Shutdown Procedures), 17 (Employee Training), and 18 (Tracking, Recordkeeping, Maintenance, and Operational Performance), and the equipment-manufacturer documentation referenced below. Where any conflict exists between these SOPs and the manufacturer's most current published instructions, the manufacturer's instructions govern, and these SOPs shall be updated accordingly.

Equipment of Record. Autoclave: Bondtech / Fabrication Associates horizontal pressure vessel, Drawing 10704, ASME Code Section VIII Div. 1, "U" Cert No. 10,264, National Board No. 462, Model W07-1983, year built 2008, 6'-0" inside diameter × 13'-0" length, 72" rapid-opening door, MAWP FV/75 psi at maximum temperature 500°F, hydrostatic test pressure 98 psi. The complete Bondtech Corporation Operations and Maintenance Manual for the NAFTA Model 10704 6' × 13' Autoclave (Bondtech Corporation, Somerset, KY) is included as the supporting attachment to this appendix and provides the manufacturer's installation, operation, maintenance, calibration, and shutdown instructions referenced in SOPs N-1 through N-5. Steam source: Hurst Boiler & Welding Co. Scotch Marine firetube boiler, Model S500-150-136, Serial No. 0850116, 100 BHP, MAWP 150 psi, maximum designed steaming capacity 3,450 lb/hr, propane-fired (see Appendix K for the air-quality determination and the P-2 Manufacturer's Data Report).

N-1. Autoclave Operation SOP

Purpose. Establish the standard sequence for receiving, loading, treating, and unloading regulated medical waste using the Bondtech autoclave so that each cycle achieves the required time/temperature parameters and produces sterilized waste suitable for disposal as ordinary solid waste at a permitted sanitary landfill.

Treatment Parameters. Each cycle shall be operated at a chamber temperature of at least 121°C (250°F) for a minimum dwell time appropriate to the load. The facility's standard cycle setpoint is 295°F (146°C) at saturated steam, maintained for not less than 25 minutes at temperature after the air-removal/come-up phase is complete, consistent with the parameters described in operations plan Section 9 and the manufacturer's cycle specifications. Cycle pressure shall remain within the autoclave's MAWP of 75 psi at all times. The maximum load per cycle is the lesser of the manufacturer's rating or approximately 1,500 pounds of regulated medical waste.

Step 1 — Pre-Operation Checks (start of each operating day).

- Verify that PPE (gloves, eye protection, lab coat or gown, closed-toe shoes, heat-resistant gloves for unloading) is available at the PPE cabinet near the treatment area entry.
- Verify the eyewash/safety shower is unobstructed and flushed within the past week (per the eyewash inspection log in Section 18 records).
- Inspect the autoclave door gasket for cuts, tears, or debris; clean if needed; replace if damaged before running a cycle.
- Verify the chart recorder has paper and a working pen (or that the electronic recorder is logging) and that the current date/time is correct.
- Verify the chamber drain is open to the sanitary sewer connection and the floor drain strainers are clear.
- Start the Hurst boiler in accordance with the boiler operator's instructions; confirm propane supply is open at the tank, low-water cutoff is functional, and steam pressure builds within normal range. Do not load the autoclave until steam pressure has reached the operating range.
- Confirm the chamber temperature and pressure gauges read at ambient prior to charging the chamber, and that the chamber is empty and dry.

Step 2 — Load Preparation and Loading.

- Weigh the staged waste (red-bagged, in approved reusable containers or cart) and record the load weight in the treatment log.
- Do not exceed the cycle's rated load (target ≤ 1,500 lb). Do not pack the chamber tightly; arrange containers so steam can circulate.

- Do not open red bags. Open containers (e.g., reusable tubs with lids) shall be loaded with lids ajar or removed to permit steam penetration, in accordance with the manufacturer's loading guidance.
- Place a chemical process indicator (Class 5 or 6 integrator) inside one of the load containers in the most difficult-to-penetrate location (typically the geometric center of the largest container). Once per week, also place a biological indicator (BI) per SOP N-2.
- Roll the loaded cart into the chamber using the rail/track system. Verify nothing protrudes beyond the door seal.
- Close and seal the 72" rapid-opening door per the manufacturer's closure procedure; verify the door interlock engages before steam admission. The cycle shall not start if the door interlock is faulted.

Step 3 — Cycle Execution.

- Select the standard treatment cycle on the controller. The cycle shall include an air-removal phase (vacuum pulses or gravity displacement as configured), come-up to the dwell setpoint, dwell at temperature for the programmed time, depressurization, and dry/cool-down.
- Start the cycle. The operator shall remain available to the unit during the cycle; the chart recorder shall log temperature and pressure for the full cycle.
- Acceptance criteria: minimum dwell time of 25 minutes at not less than 295°F (146°C) chamber temperature with corresponding saturated-steam pressure within MAWP. If the recorder shows the dwell time or temperature was not met, the cycle shall be re-run with the same load after correcting the root cause.
- If the cycle alarms or aborts, do not open the door until pressure has been verified at zero and chamber temperature has cooled to a safe level. Follow the Emergency Shutdown SOP (N-4) if the abort is due to over-pressure, over-temperature, loss of steam, or other safety condition.

Step 4 — Unloading and Documentation.

- Confirm pressure gauge reads zero psig and the chamber is fully depressurized before unsealing the door. Use heat-resistant gloves and a face shield.
- Inspect the chemical process indicator; if the indicator failed to change to the "pass" condition, do not release the load — re-run the cycle and investigate.
- Transfer treated waste to the designated compactor or roll-off for transport to the permitted sanitary landfill (Section 19). Once treated, the material is no longer regulated medical waste and may be handled as solid waste, but shall remain segregated until placed in the compactor.
- Tear off, sign, date, and file the chart recorder strip (or export and file the electronic record) for the cycle. Record in the treatment log: cycle number, date, operator initials, load weight, peak temperature, dwell time, peak pressure, chemical indicator result, BI result (if run), and any anomalies.
- Return the cart to the container wash area for cleaning per the Container Washing procedure (Section 10).

N-2. Biological Indicator (Spore) Testing SOP

Purpose. Verify, through biological (spore) challenge testing, that the autoclave consistently achieves sterilization conditions sufficient to inactivate regulated medical waste pathogens.

Indicator and Frequency. The facility uses commercially prepared self-contained biological indicators (SCBIs) loaded with *Geobacillus stearothermophilus* spores at a minimum population of 1×10^6 per indicator, with a labeled D-value appropriate to 121°C saturated-steam sterilization. A BI shall be run at a minimum of once per operating week and as part of any post-repair or post-calibration acceptance test. Each BI lot shall be accompanied by an unprocessed positive control of the same lot for incubation alongside the test indicator.

- Place the test BI inside a representative load container, at the geometric center, in the most difficult-to-penetrate location of the load. Do not place the BI loose on the cart floor.
- Run the standard cycle per SOP N-1.
- At cycle completion, retrieve the test BI using heat-resistant gloves and place it — together with the unprocessed positive control of the same lot — in the incubator at the temperature and time specified by the BI manufacturer (typically 55–60°C for up to 48 hours, or per the manufacturer's rapid-readout instructions).
- Read and record the result. A satisfactory test = test BI negative (no growth / color change to "pass") AND positive control positive (growth / color change to "fail").

- Failure response: If the test BI is positive (growth), or if the positive control is negative (suggesting BI lot failure), suspend the autoclave from service for waste-producing cycles, quarantine all loads treated since the last passing BI, investigate (door gasket, air removal performance, temperature/pressure calibration, steam quality, loading practice), repair or recalibrate as necessary, and demonstrate three (3) consecutive passing BI cycles before returning the unit to service. Quarantined loads shall be re-treated. Document the failure, root cause, corrective action, and return-to-service test results in the maintenance log.
- Retain BI test records (cycle number, date, BI lot number, result, operator initials) for a minimum of three (3) years.

N-3. Equipment Calibration and Verification SOP

Purpose. Maintain demonstrable accuracy of the autoclave temperature sensor(s), pressure gauge(s), chart recorder, and BI incubator so that the operational records faithfully reflect treatment conditions.

Annual Third-Party Calibration. At least once every twelve (12) months, the autoclave chamber temperature sensor(s) (RTD/thermocouple), pressure transducer/gauge, chart recorder, and BI incubator shall be calibrated by the equipment manufacturer or by a qualified third-party service provider using instruments traceable to NIST. Calibration tolerance: temperature $\pm 1^{\circ}\text{C}$; pressure ± 1 psi; recorder time base ± 30 seconds per hour; incubator $\pm 1^{\circ}\text{C}$ of setpoint. Calibration certificates shall be retained for a minimum of three (3) years.

Daily/Weekly Verification. At the start of each operating day, the operator shall verify: (a) the controller display, the independent chamber temperature gauge, and the chart recorder all agree within calibration tolerance at the same point in time; (b) the pressure gauge reads zero psig when the chamber is open at atmospheric; (c) the chart recorder advances correctly through one full revolution or one printed page (timebase check). At least weekly, the operator shall confirm the chamber safety relief valve is not weeping or fouled by visual inspection (do not test-lift while at pressure).

Boiler Inspections. The Hurst Scotch Marine boiler shall receive any required state boiler inspections in accordance with applicable Arizona requirements; safety valves and low-water cutoffs shall be tested per manufacturer's instructions; inspection certificates shall be retained on file with the Manufacturer's Data Report (Form P-2, attached to Appendix K).

Out-of-Spec Response. Any instrument that is out of tolerance, drifting, or non-functional shall be repaired or replaced before the next waste-producing cycle, and the cycle records of the period since the last successful verification shall be reviewed to determine whether re-treatment of any load is required. The disposition decision and rationale shall be documented in the maintenance log.

N-4. Emergency and Routine Shutdown SOP

Emergency Shutdown (Fire, Steam Leak, Over-Pressure, Loss of Power, Injury, Evacuation Order).

Operators are trained that the autoclave is designed to fail safely; do not attempt to manually defeat interlocks or open the door during a fault condition.

- Press the autoclave EMERGENCY STOP / ABORT button. If a fire is involved or the threat extends beyond the unit, sound the fire alarm.
- Close the manual steam supply isolation valve at the autoclave inlet; if it is safe to do so, also close the boiler steam header valve.
- If safe and accessible: secure the Hurst boiler by closing the propane shutoff at the tank, opening the burner kill switch, and isolating power at the boiler disconnect.
- De-energize the autoclave at the main electrical disconnect serving the unit. Do not attempt to open the autoclave door until pressure reads zero psig and chamber temperature has cooled.
- Evacuate per Appendix H if the emergency requires evacuation; account for all personnel at the assembly area; notify the Emergency Coordinator and, as applicable, 911 and the agencies listed in the Tier 2 notification table in Appendix H.
- Apply lockout/tagout to the steam, propane, and electrical disconnects before any repair or inspection work is performed by maintenance personnel.

Normal End-of-Day Shutdown. After the final cycle of the day: (1) verify the last load is treated and unloaded; (2) close the steam supply valve at the autoclave; (3) shut down the Hurst boiler per the boiler operator's instructions, including blowdown if required by manufacturer; (4) close the propane manual valve at the tank if the facility will be unattended; (5) power-down the autoclave controller and recorder; (6) confirm the chamber door is closed but not pressurized; (7) confirm floor drains are clear and the treatment area is clean; (8) sign the daily housekeeping log per Section 12.

Extended/Planned Shutdown. For any planned shutdown longer than seven (7) days, follow Section 15 (Facility Shutdown Procedures). Drain the autoclave chamber to the sewer connection; isolate steam, water, propane, and electrical supplies; lock out and tag out per OSHA 29 CFR 1910.147; verify no regulated medical waste remains untreated and on-site beyond storage limits, transferring to a backup treatment facility (Appendix I) if needed; and post the unit with an "Out of Service" tag indicating the responsible person.

N-5. Operator Training Program

Purpose. Ensure each person who operates the autoclave, handles regulated medical waste, or performs maintenance on the treatment system has the knowledge and demonstrated competency required to do so safely and in compliance with this operations plan, applicable Arizona requirements, and OSHA 29 CFR 1910.1030 (Bloodborne Pathogens).

Initial Training. Before performing duties involving regulated medical waste or operating the autoclave/boiler, each employee shall complete initial training covering all of the following topics. Initial training shall be documented (date, topics, trainer, trainee signature) and retained in the personnel training file.

- Overview of regulated medical waste, acceptable and unacceptable waste categories (Sections 3 and 4), and packaging/labeling requirements.
- Bloodborne Pathogens Standard (OSHA 29 CFR 1910.1030), including exposure control plan, PPE selection and use, hepatitis B vaccination offer, and post-exposure procedures.
- Waste acceptance, radioactive screening, and non-conforming waste handling (Sections 6, 7, 8).
- Operation of the Bondtech autoclave (SOP N-1), including pre-operation checks, loading, cycle execution, unloading, and recordkeeping.
- Operation of the Hurst Scotch Marine boiler at the operator level (start-up, shutdown, normal monitoring, alarm response, blowdown if performed by the operator), in accordance with the boiler manufacturer's instructions. Any employee who performs boiler operation shall have completed any state-required boiler operator training applicable to the unit.
- Biological indicator (spore) testing (SOP N-2) and calibration/verification activities (SOP N-3).
- Spill response (Section 16), including donning PPE, use of the biohazard spill kit, drain protection, disinfection, and packaging of cleanup materials for re-treatment.
- Emergency preparedness and response (Section 14, Appendix H), evacuation routes and assembly point, headcount procedure, emergency equipment locations, and the tiered notification protocol.
- Lockout/tagout (OSHA 29 CFR 1910.147) for the steam, propane, and electrical isolations on the autoclave and boiler.
- Recordkeeping responsibilities (Section 18), including treatment logs, BI logs, calibration records, training records, and tracking documents.

Competency Verification. Before working independently on the autoclave, each new operator shall successfully complete a supervised cycle in the presence of an experienced operator or the Emergency Coordinator, demonstrating each step of SOP N-1. The supervisor shall sign the training file confirming competency.

Annual Refresher. Each employee shall complete a refresher of the topics above at least once every twelve (12) months, and additionally any time procedures change, new equipment is added, or a near-miss or incident review identifies a training gap. Refresher training shall be documented in the same manner as initial training.

Recordkeeping. Training records (initial, competency verification, refresher) shall be maintained at 3017 N Rockwell Ave, Casa Grande, AZ 85122 by Victor DiVello or his designee, and shall be made available to ADEQ on request. Training records shall be retained for the duration of the employee's employment plus three (3) years.

Action items prior to submittal: (1) request the Hurst Boiler operator's manual and recent state boiler inspection certificate(s) from the boiler service provider and place them behind this appendix; (2) confirm Arizona's current boiler-operator licensing requirements with the Arizona Industrial Commission / Boiler Inspection program and document compliance.