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Contents

Purpose 1

Policy 1

Responsibilities 1

 Occupational Safety and Health (OSH) 1

 Deans, Department Heads, and Directors (Campus Units) 1

 Campus Unit Responsible Person..... 1

 Supervisors of PIT Operators (Supervisors)..... 1

 PIT Operators 2

Procedures 2

 Training and Evaluation 2

 Operator Evaluation and Re-evaluation..... 3

 Refresher Training 3

 Certification..... 3

 Authorization 4

 Pre-Use Inspection..... 4

 Operation 4

 Loading..... 4

 Traveling 4

 Fueling..... 5

 Changing and Charging Batteries 5

 Maintenance..... 5

 Modifications 5

 Program Evaluation 5

Appendix A – Unit-specific Procedures I

Appendix B – Operator Evaluation IV

Appendix C – Pre-use Inspection.....VII

Appendix D – Program Audit ChecklistIX

Document Revisions.....XI



Safety & Compliance

PURPOSE

The University of Illinois at Urbana-Champaign (U of I), through the Division of Safety and Compliance (S&C), Occupational Safety and Health Department (OSH), has established this Powered Industrial Truck (PIT) Program to assist campus units in providing a safe work environment and to promote compliance with State and Federal occupational safety and health standards, particularly the Powered Industrial Truck Standard of the Occupational Safety and Health Administration (OSHA) located in 29 CFR 1910.178 and enforced by the Illinois Occupational Safety and Health Administration (ILOSHA).

It is expected that campus units will develop written unit-specific standard operating procedures (SOPs) to complement and meet the requirements detailed in this program, including completion and submission of Appendix A to OSH.

POLICY

Campus units that operate PITs must ensure that supervisors and operators comply with all aspects of this PIT Program. All university students, faculty and staff that will operate PITs must successfully complete a training program and receive authorization from their respective campus unit prior to the operation of any PIT on campus.

RESPONSIBILITIES

Occupational Safety and Health (OSH)

OSH is responsible for the administration of this Program. OSH maintains copies of all records for services provided by OSH pertaining to this Program. An OSH program coordinator is designated to provide guidance, regulatory interpretation and oversight for this Program and to review this Program annually.

Deans, Department Heads, and Directors (Campus Units)

Campus units shall designate a Responsible Person that will be charged with implementing this Program and unit-specific SOPs.

Campus Unit Responsible Person

The Campus Unit Responsible Person shall understand the requirements of this PIT Program and applicable OSHA regulations and shall complete the PIT training. The Responsible Person shall work with campus unit supervisors to identify personnel that operate PITs and ensure that all personnel within their unit affected by this Program receive proper training. The Responsible Person shall ensure that unit-specific SOPs are reviewed annually.

Supervisors of PIT Operators (Supervisors)

Supervisors and Principal Investigators (PIs) shall understand the requirements of this PIT Program and applicable OSHA regulations and shall complete the PIT training. Supervisors are responsible for enforcing proper work practices under their responsible charge in accordance with this Program and unit-specific SOPs. They shall assist in the development and annual review of unit-specific SOPs. They



Safety & Compliance

shall ensure that all their personnel who operate PITs receive training and authorization to operate the unit's PITs.

PIT Operators

Employees shall follow the requirements of this Program, unit-specific SOPs, and training. They shall not operate any PITs for which they have not been trained and authorized. They shall complete the Daily Pre-Use Inspection Checklist before operating any PIT. They shall observe the operation of PITs in their unit and report unsafe practices to their supervisor.

PROCEDURES

Training and Evaluation

Operator training, evaluation and certification shall be conducted by designated personnel who have the knowledge, training and experience to train prospective PIT operators and evaluate their proficiency.

Initial training is the responsibility of the campus unit. Contact OSH for assistance in identifying options for training providers.

Training shall include the following:

- Operating instructions, warnings, and precautions for the type(s) of truck the operator will be authorized to operate;
- Differences between the truck and an automobile;
- Truck controls and instrumentation;
- Engine or motor operation;
- Steering and maneuvering;
- Visibility (including restrictions due to loading);
- Fork and attachment adaptation, operation, and use limitations;
- Vehicle capacity;
- Vehicle stability;
- Any vehicle inspection and maintenance that the operator is required to perform;
- Refueling and/or charging and recharging of batteries;
- Operating limitations;
- Any other operating instructions, warnings, or precautions listed in the operator's manual for the type(s) of vehicle that the employee is being trained to operate;
- Surface condition where the vehicle will be operated;
- Composition of loads to be carried and load stability;
- Load manipulation, stacking, and restacking;
- Pedestrian traffic in areas where the vehicle will be operated;
- Narrow aisles and other restricted places where the vehicle will be operated;
- Hazardous locations where the vehicle will be operated;
- Ramps and other sloped surfaces that could affect the vehicle's stability;



Safety & Compliance

- Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a build-up of carbon monoxide or diesel exhaust; and
- Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation.

Where units provide their own training and evaluation, copies of the sign-in sheets, written quizzes, equipment hands-on checklists, and/or evaluation checklists shall be made available to OSH upon request.

Operator Evaluation and Re-evaluation

Prospective PIT operators must complete an operator evaluation before being authorized to operate any PIT. Operator evaluations shall be completed by the campus unit's responsible person or employee's supervisor prior to granting authorization to operate a PIT.

If a prospective PIT operator has previously received classroom training, and such training is appropriate to the PIT and working conditions encountered, additional training is not required. The operator must still be evaluated and found competent to operate the PIT safely. Documentation of completed classroom training must be provided to the Campus Unit Responsible Person.

PIT Operators who were trained and authorized on a different type of PIT than the type they are assigned to use are required to complete an operator evaluation on the new equipment prior to regular operation.

Appendix B provides an operator evaluation form that shall be completed for each operator for each PIT they are assigned to use, at least every three years. Copies of the completed operator evaluations shall be provided to OSH upon request.

Refresher Training

Refresher training is required under the following circumstances:

- The operator has been observed to operate the PIT in an unsafe manner;
- The operator has been involved in an accident or near-miss incident;
- The operator has received an evaluation that reveals that the operator is not operating the PIT safely;
- The operator is assigned to drive a different type of PIT; or
- A condition in the workplace changes in a manner that could affect safe operation of the PIT.

Certification

The trainer shall certify that each operator has been trained as described above. The written certification shall include the operator's name, date of training, and identity of person(s) performing the training.



Safety & Compliance

Authorization

The Campus Unit Responsible person or employee's supervisor shall authorize each PIT operator on the PIT(s) they will operate. This authorization shall occur only after successful completion of the training certification and evaluation processes, and prior to work assignments requiring PIT operation. See Appendix B of this document for the authorization form.

Pre-Use Inspection

Prior to the operation of any PIT, the Pre-Shift Inspection Checklist found in Appendix C, or a checklist specific to the model of PIT in use shall be completed. This applies at the beginning of every work period, and/or when a new equipment operator takes control of the PIT.

Any safety defects (such as hydraulic fluid leaks; defective brakes, steering, lights, or horn; and/or missing fire extinguisher, lights, seat belt, or back-up alarm) must be reported for immediate repair and removed from service. PITs shall be tagged out of service to prevent use until repairs are completed.

Operation

Only authorized personnel shall operate a PIT. Trainees may operate a PIT **only** under the direct supervision of an authorized PIT operator and where such operation does not endanger the trainee or other personnel.

When a PIT is left unattended (more than 25' away or out of sight) the load engaging means shall be fully lowered, controls neutralized, power shut off, brakes set and key removed. Wheels shall be blocked or chocked if the PIT is parked on an incline. Do not block walkways, roadways, or emergency access areas.

Operators shall immediately report all accidents, regardless of fault and severity, to their Supervisor.

Loading

Only operate the PIT with loads that are within its rated capacity. Loads should be safely arranged, stable, and centered. Adjust long or high (including multiple-tiered) loads that may affect the capacity. PITs equipped with attachments shall be operated as partially loaded trucks even when not handling a load.

Traveling

The operator shall slow down and sound the horn at all cross aisles and other locations where vision may be obstructed. If the load being carried obstructs forward view, the driver shall travel with the load trailing. Grades shall be ascended and descended slowly. Position the load uphill relative to the operator when ascending or descending grades. While negotiating turns, reduce speed and turn the hand steering wheel in a smooth, sweeping motion.



Safety & Compliance

Fueling

Fuel tanks shall not be filled while the engine is running. Avoid spillage. Spillage of oil or fuel must be absorbed using appropriate absorbent material, the affected area washed, and the fuel tank cap replaced before restarting engine. Any spill clean-up debris must be disposed of as hazardous waste by the Division of Research Safety.

Changing and Charging Batteries

Battery charging installations shall be located in areas designated for that purpose. Facilities shall be provided in these locations for: flushing and neutralizing spilled electrolyte, fire protection, protection of charging apparatus from damage by trucks, adequate ventilation for dispersal of fumes from gassing batteries and emergency eyewash stations in accordance with the Emergency Eyewash and Shower program.

Employees charging and changing batteries shall be authorized to do the work, trained in the proper handling, and required to wear personal protective equipment (PPE) in accordance with the written hazard assessment for these tasks. Which may include safety glasses, face shields, long sleeves, rubber boots, aprons, and gloves. Refer to the campus [Personal Protective Equipment Program](#) for further guidance.

Maintenance

Any PIT not in safe operating condition shall be immediately removed from service. Authorized personnel shall make all repairs prior to the PIT being returned to service. Repairs to the fuel and ignition systems of PITs that involve fire hazards shall be conducted only in locations designated for such repairs.

PITs in need of repairs to the electrical system shall have the battery disconnected before repairs are begun.

Modifications

All modifications to PITs shall have prior written approval by the manufacturer, and new rated load capacities calculated and posted on the PIT.

Program Evaluation

This Program shall be reviewed annually by OSH. The unit-specific documents such as SOPs, training and evaluation records, inspection forms and maintenance records shall be reviewed and updated by the respective Campus Unit Responsible Person, with input from supervisors and operators, at least annually and more frequently as hazards, tasks, procedures and/or equipment change.

REFERENCES

- 29 CFR 1910 SUBPART N, OCCUPATIONAL SAFETY AND HEALTH STANDARDS – MATERIALS HANDLING AND STORAGE
- 29 CFR 1910.178, OCCUPATIONAL SAFETY AND HEALTH STANDARDS – POWERED INDUSTRIAL TRUCKS



APPENDIX A – UNIT-SPECIFIC PROCEDURES



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Campus Unit: _____

It is the policy of the above-mentioned unit to comply with the University of Illinois Powered Industrial Truck Program. The purpose of this document is to complement the University Program with site-specific written standard operating procedures.

PROGRAM ADMINISTRATION

The University of Illinois recognizes that supervisors are not necessarily experts in the area of PIT operation. As outlined in Policy Number RP – 17 of the Campus Administrative Manual (CAM), supervisors are “responsible for maintaining a healthy and safe environment within their areas under their supervision and are responsible for the safety of activities, procedures and operations under their control or direction.” OSH and other qualified personnel will assist supervisors and individuals in fulfilling these obligations upon request.

The following individual has responsibility for the administration of the Powered Industrial Truck Program in the above-mentioned unit. It is the responsibility of this person to supervise the requirements of the Powered Industrial Truck Program and to ensure that operators of PITs have been properly trained and authorized by the unit.

(Name) (Title)

OPERATOR TRAINING AND EVALUATION

Each PIT Operator shall be deemed competent to operate a PIT safely, as demonstrated by the successful completion of training and operator evaluation.

Evaluation of each PIT Operator's performance shall be conducted at least once every three years by the Unit Responsible Person and the Operator’s Supervisor.

Copies of the training documentation and operator evaluation can be located in the individual’s personnel file in the following location: _____.

AUTHORIZED OPERATORS

Only the following individuals may operate the designated PIT(s):

Name	UIN	PIT Make/Model



Safety & Compliance

PRE-SHIFT INSPECTIONS

PITs shall be examined before being placed in service, and shall not be placed in service if the examination shows any condition adversely affecting the safety of the vehicle. Such examination shall be made at least daily.

Where industrial trucks are used on a round-the-clock basis, they shall be examined after each shift. Defects when found shall be immediately reported and corrected.

Copies of the inspection documentation can be located in the following location:

_____. Inspection records shall be kept for _____.

MAINTENANCE AND REPAIR

Routine maintenance and repair of the unit's PITs will be performed by _____.



APPENDIX B – OPERATOR EVALUATION



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OPERATOR EVALUATION				
Name: _____		Department: _____		
UIN: _____		Class/Lift Code: _____		
Lift Make/Model: _____		Date: _____		
Location: _____				
Pre-Start Check	Yes	No	NA	
Checks engine and oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Checks hydraulics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Checks ROPS/FOPS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Checks carriage and attachment points	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Checks all I.D plates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Checks tires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Checks forks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Checks seat belt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Start-up				
Gets on forklift properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Puts on and adjusts seatbelt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sets controls to neutral	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sounds and checks horns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Checks for personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Starts engine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Performs function checks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Operation				
Accelerates smoothly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Limits speed to conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Turning				
Slows before turns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Considers balance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Stays within lines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Careful of turning radius	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Stopping				
Slows down	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Comes to a full stop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sets parking brake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Comments:				
This employee is authorized to operate the Lift Make/Model identified above.			Yes <input type="checkbox"/>	No <input type="checkbox"/>
Evaluator: _____		Signature: _____		

Load Pick-up	Yes	No	NA
Aligns forklift with load	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Approaches slowly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stops prior to load	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Makes final adjustments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifts load slowly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cradles load	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Backs off slowly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lowers forks immediately	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Checks load stability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transport			
Accelerates slowly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Keeps load low	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Frequently scans area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Decelerates for turns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exercises caution on hills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Handles ascent properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Handles descent properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Load Deposit			
Aligns forks with landing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Approaches slowly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stops prior to landing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Makes final adjustments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Positions load above landing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levels load	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deposits load slowly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Backs off slowly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Forklift shutdown			
Parks on level surface	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sets parking brake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sets controls to neutral	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turns off engine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exits machine correctly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Safety & Compliance

Class I: Electric Motor Rider Trucks				
Lift Code 1: Counterbalanced Rider Type, Stand-Up	Lift Code 4: Three Wheel Electric Truck, Sit- Down	Lift Code 5: Counterbalanced Rider, Cushion Tires, Sit-Down	Lift Code 6: Counterbalanced Rider, Pneumatic or Either Type Tire, Sit-Down	
Class II: Electric Motor Narrow Aisle Trucks				
Lift Code 1: High Lift Straddle	Lift Code 2: Order Picker	Lift Code 3: Reach Type Outrigger	Lift Code 4: Side Loaders: Platforms	
Lift Code 4: Side Loaders: High Lift Pallet	Lift Code 4: Turret Trucks	Lift Code 6: Low Lift Platform	Lift Code 6: Low Lift Pallet	
Class III: Electric Motor Hand Trucks or Hand/Rider Trucks				
Lift Code 1: Low Lift Platform	Lift Code 2: Low Lift Walkie Pallet	Lift Code 3: Tractors	Lift Code 4: Low Lift Walkie/Center Control	Lift Code 5: Reach Type Outrigger
Lift Code 6: High Lift Straddle	Lift Code 6: Single Face Pallet	Lift Code 6: High Lift Platform	Lift Code 7: High Lift Counterbalanced	Lift Code 8: Low Lift Walkie/Rider Pallet and End Control
Class IV: Internal Combustion Engine Trucks (Solid/Cushion Tires)		Class V: Internal Combustion Engine Trucks (Pneumatic Tires)		Class VI: Electric and Internal Combustion Engine Tractors
Lift Code 3: Fork, Counterbalanced (Cushion Tire)		Lift Code 4: Fork, Counterbalanced (Pneumatic Tire)		Lift Code 1: Sit-Down Rider (Draw Bar Pull Over 999 lbs.)



APPENDIX C – PRE-USE INSPECTION



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PRE-USE INSPECTION FORM				
Make/Model:			Date:	
Note general vehicle condition. Clear away all collected debris, steam clean if necessary. Check for mechanical damage and loose or leaking components. Report faults to your supervisor.				
Before starting engine, check the following:				
WALK-AROUND ITEMS	STATUS			REMARKS
	OK	NO	NA	
Walk-around inspection (warning decals, capacity plate, etc.)				
Forks/locking pins, carriage, mast				
Wheels, tires & lug nuts (condition/pressure)				
Battery (electrolyte level, connections)				
Engine (fluid levels, leaks, belts, hoses, debris)				
Transmission (fluid level, leaks)				
Air cleaner (clean or change as required)				
Radiator (fluid level, leaks)				
Hydraulic tank (fluid level, leaks)				
Fuel tank (secure, valve open & fuel level)				
Overhead guard (no damage)				
Seatbelt				
After starting engine, check the following:				
START-UP ITEMS	STATUS			REMARKS
	OK	NO	NA	
Engine (sounds normal, no excessive exhaust smoke)				
Gauges/warning lights (fuel/charge level, oil pressure, etc.)				
Wipers & lights				
Warning devices (horn, back-up alarm, strobe lights, etc.)				
All powered controls				
Direction/speed controls				
All brakes				
Steering				
Fuel/Charge Level				
Note anything abnormal or in need of repair:				
Operator Name:		Operator Signature:		



APPENDIX D – PROGRAM AUDIT CHECKLIST



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PROGRAM AUDIT CHECKLIST		
	Yes	No
1. Has a program administrator, with appropriate training and experience, been designated and identified in the written program?	<input type="checkbox"/>	<input type="checkbox"/>
2. Have unit-specific procedures (SOP) been developed?	<input type="checkbox"/>	<input type="checkbox"/>
3. Have all Operators been trained, evaluated and authorized for the respective PIT(s) they will operate?	<input type="checkbox"/>	<input type="checkbox"/>
4. Records		
a. Sign-in Sheets for training	<input type="checkbox"/>	<input type="checkbox"/>
b. Written quizzes	<input type="checkbox"/>	<input type="checkbox"/>
c. Operator Evaluation Checklists	<input type="checkbox"/>	<input type="checkbox"/>
d. Pre-Use Inspections	<input type="checkbox"/>	<input type="checkbox"/>
5. PITs shut down appropriately		
a. Load engaging means fully lowered	<input type="checkbox"/>	<input type="checkbox"/>
b. Controls neutralized	<input type="checkbox"/>	<input type="checkbox"/>
c. Power shut off	<input type="checkbox"/>	<input type="checkbox"/>
d. Brakes set	<input type="checkbox"/>	<input type="checkbox"/>
e. Keys removed and secured	<input type="checkbox"/>	<input type="checkbox"/>
6. Battery charging installations have facilities for:		
a. Flushing and neutralizing spilled electrolyte	<input type="checkbox"/>	<input type="checkbox"/>
b. Fire Protection	<input type="checkbox"/>	<input type="checkbox"/>
c. Protection of charging apparatus from damage by PITs	<input type="checkbox"/>	<input type="checkbox"/>
d. Adequate ventilation for dispersal of vapors from gassing batteries	<input type="checkbox"/>	<input type="checkbox"/>
e. Emergency eyewash stations	<input type="checkbox"/>	<input type="checkbox"/>
7. Are employees performing charging duties authorized to do the work?	<input type="checkbox"/>	<input type="checkbox"/>
8. Employees wear appropriate PPE (per written JHAs)	<input type="checkbox"/>	<input type="checkbox"/>
9. Are repairs made by authorized personnel only?	<input type="checkbox"/>	<input type="checkbox"/>



DOCUMENT REVISIONS

Revision Dates

February 26, 2020	Initial version
March 29, 2020	Minor formatting
April 8, 2021	Review, update format, and minor grammatical edit
February 3, 2026	Review, update format, minor grammatical edits, and update Appendix A