ACCIDENT PREVENTION PROGRAM

Safety Policies & Procedures

Aligned with ACPA Safe Operator Practices & ASME B30.27

Company	JDE Concrete Pumping Inc.
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"We Build Foundations for Life"

We Build Safety Into Every Project.

SECTION 1: MANAGEMENT COMMITMENT & POLICY STATEMENT

JDE Concrete Pumping Inc. is committed to providing all employees with a safe and healthful workplace. Safety is a fundamental value that guides every decision, every project, and every employee. Our commitment extends beyond regulatory compliance — we are dedicated to creating a workplace where every employee returns home safely at the end of every day.

JDE Concrete Pumping Inc. is committed to:

- Preventing workplace injuries and illnesses
- Eliminating unsafe acts and conditions
- Providing proper equipment and training
- Complying with OSHA, MIOSHA, DOT, and all applicable regulations
- Aligning operations with ACPA Safe Operator Practices and ASME B30.27
- Empowering employees through Stop Work Authority
- Continuously improving safety performance

No project, schedule, customer demand, or production goal takes precedence over employee safety. Our Goal: Zero Injuries. Zero Accidents. Zero Excuses.

Senior management will be actively involved with employees in establishing and maintaining an effective safety program, including:

- Promoting safety committee participation
- Providing safety and health education and training
- Reviewing and updating workplace safety rules

President / CEO Signature:

Joel Eerdmans

SECTION 2: SAFETY RESPONSIBILITIES

Ownership & Executive Leadership

Executive leadership shall:

- Demonstrate visible safety leadership on all job sites
- Allocate resources for training and equipment
- Review safety metrics monthly
- Conduct annual program reviews
- Ensure compliance with OSHA, MIOSHA, DOT, ACPA, and ASME B30.27 requirements

Project Managers

Project Managers shall:

- Include safety in project planning
- Coordinate subcontractor safety requirements
- Verify site-specific safety plans, including pump setup zones and power line clearances
- Conduct regular site visits
- Review incidents and corrective actions

Superintendents & Foremen

Superintendents and Foremen shall:

- Conduct daily Job Hazard Analyses (JHA) before work begins
- Perform daily pre-pour site inspections
- Conduct toolbox talks, including pump-specific safety topics
- Correct hazards immediately
- Verify employee competency for assigned tasks
- Enforce all company safety rules and Stop Work Authority

Pump Operators

All Concrete Pump Operators shall:

- Hold current ACPA Certification or be actively pursuing certification
- Perform daily equipment inspections per manufacturer checklist and ACPA guidelines
- Assess site conditions prior to setup — ground stability, overhead hazards, underground utilities
- Deploy all outriggers fully and verify ground bearing capacity before operating boom
- Maintain minimum 20-foot clearance from power lines (50 feet if voltage exceeds 350kV)
- Refuse and report any unsafe setup or operational conditions using Stop Work Authority
- Never allow personnel to work beneath an elevated boom
- Perform equipment washout and cleanout procedures safely per ACPA standards

All Employees

All employees shall:

- Follow all company safety procedures

- Wear required PPE at all times
- Report hazards immediately to their supervisor
- Participate actively in safety meetings and toolbox talks
- Maintain tools and equipment in safe condition
- Stop work when unsafe conditions exist

SECTION 3: STOP WORK AUTHORITY

Every JDE Concrete Pumping employee has the authority AND responsibility to STOP WORK whenever an unsafe condition exists. No employee will be disciplined for stopping unsafe work in good faith.

Work shall be stopped when any of the following exist:

- Unsafe conditions that cannot be immediately corrected
- Procedures are not being followed
- Equipment is unsafe, damaged, or uninspected
- Environmental conditions create hazards (soft ground, weather, limited visibility)
- Power line clearances cannot be maintained
- Outrigger stability is questionable
- A serious injury potential exists

After stopping work, the employee shall immediately notify their supervisor, who will assess the situation, implement corrective action, and document the stop-work event.

SECTION 4: SAFETY TRAINING PROGRAM

New Employee Orientation

All new employees shall receive orientation training on the first day of employment or job transfer, covering:

- Company safety expectations and this Accident Prevention Program
- PPE requirements and proper use
- Hazard Communication (HazCom) and SDS access
- Emergency procedures and emergency phone numbers
- Incident and near-miss reporting requirements
- Equipment safety and inspection protocols
- Silica awareness and exposure controls
- Fall protection requirements
- Concrete pumping hazards and ACPA safe practices
- Stop Work Authority

ACPA Operator Certification

JDE Concrete Pumping requires all boom pump and line pump operators to pursue and maintain ACPA Certification. ACPA Certification:

- Meets the safety training requirement under ASME B30.27-3.1.2(b)(2)
- Requires completion of the ACPA 5.0 Operator Safety Training Presentation
- Includes written examination covering operational characteristics, power line avoidance, stability requirements, and emergency controls
- Must be renewed to keep operators current on safe practices

Annual Refresher Training

Required annual training includes:

- OSHA/MIOSHA regulatory updates
- ACPA Safe Operator Practices — boom pump and line pump
- ASME B30.27 responsibilities for operators and crew
- Fall protection
- Silica control
- Excavation safety
- Heat illness prevention and cold weather safety
- Fleet and driver safety
- Defensive driving
- Emergency response and first aid review

Job-Specific Training

Supervisors will train employees on safe job tasks before work begins, review applicable safety rules, provide demonstrations when needed, and observe employees performing work. Safe operating instructions shall be provided for all new or seldom-used equipment.

Retraining

Employees will be retrained after any work-related injury caused by an unsafe act, when a supervisor observes unsafe behavior, or when significant operational changes occur.

SECTION 5: PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mandatory PPE — All Job Sites

- Hard Hat (ANSI-rated; no cracks, dents, or paint)
- ANSI Safety Glasses
- High-Visibility Vest or Shirt
- Safety-Toe Boots
- Work Gloves
- Long Pants

Task-Specific PPE

Task / Hazard	Required PPE
Concrete pump operations	Full mandatory PPE + hearing protection near engine
Wet concrete exposure	Rubber gloves, rubber boots, face shield, alkali-resistant clothing
Grinding / cutting / chipping	Face shield over safety glasses, hearing protection
Chemical handling (waterproofing)	Chemical-resistant gloves, respiratory protection, face shield
Silica-producing activities	NIOSH-approved respirator (min. N95), dust controls
High-visibility / traffic zones	ANSI Class 2 or 3 vest
Working at heights ≥ 6 ft.	Full harness personal fall arrest system
Shop / fleet maintenance	Face shield, chemical-resistant gloves, safety glasses

SECTION 6: CONCRETE PUMPING SAFETY REQUIREMENTS

This section incorporates requirements from the ACPA Safe Operator Practices, ASME B30.27 (Safety Standard for Material Placement Systems), and JDE Concrete Pumping operational procedures. All boom pump and line pump operations shall comply with these requirements.

6.1 Pre-Pour Site Assessment

Prior to pump setup, the operator and supervisor shall assess the site for:

- Ground conditions — stability, load-bearing capacity, soft or backfilled areas, underground voids
- Underground utilities — call 811 and review as-builts prior to outrigger placement
- Overhead hazards — power lines, structures, trees
- Available access and egress routes
- Proximity of workers, the public, and other equipment
- Weather conditions affecting stability and visibility

6.2 Outrigger Setup & Stability

Outrigger failure is a leading cause of concrete pump tip-overs. Full deployment and verified ground support are mandatory before the boom is raised.

- Extend ALL outriggers fully and lock into place before operating boom
- Follow manufacturer's setup charts and ASME B30.27 requirements — not rules of thumb
- Confirm ground can support the concentrated load at each outrigger pad
- Use engineered, rated pads or cribbing; ensure 100% contact under each float
- Level the truck within manufacturer's tolerance (commonly within 3 degrees)
- Verify auto-level and mechanical locks are fully engaged before any boom movement
- Maintain required setback from slopes and excavations; obtain engineering approval before encroachment
- Inform the operator of any backfilled areas, soft or muddy areas, or underground obstructions before setup

6.3 Power Line Safety

Electrocution is the most common cause of fatal accidents involving concrete pumps. Strict power line clearances must be maintained at all times.

- Minimum clearance: 20 feet from power lines carrying up to 350,000 volts
- Minimum clearance: 50 feet from power lines carrying more than 350,000 volts
- If power lines are within the boom movement area, a dedicated spotter MUST be employed whose sole responsibility is to observe the boom and warn the operator if the boom approaches the danger zone
- It is the contractor's responsibility under ASME B30.27 to provide the spotter
- The contractor must inform the pump provider whenever power lines are present at the site
- When in doubt about line voltage or clearance — STOP. Contact the utility company before proceeding

6.4 Daily Equipment Inspection

Before each shift, the operator shall perform a documented inspection covering:

- Carrier and truck: tires, brakes, lights, outriggers, pad condition, fluid levels, battery connections
- Boom structure: cracks, bent members, loose or missing fasteners, excessive wear at pins and bushings
- Hydraulic system: hoses, cylinders, fittings — check for abrasion, leaks, and chafing
- Pump and delivery system: pipes, clamps, reducers, rubber ends, gaskets, and S-tube or rock valve
- Remote control: function test all controls before operating
- Emergency stop: verify function before each use
- Out-of-service tagging: tag and remove from service any worn, damaged, or defective component

6.5 Boom Operations

- No employee shall walk beneath or work under an elevated boom
- Operator must maintain clear line of sight or use a spotter/radio communication during boom movement
- No personnel shall ride the placing boom or be lifted by the equipment
- Know the rated capacity and never exceed it
- Reduce boom radius and lower boom in high winds per manufacturer guidance

6.6 Hose Safety & Hose Whipping Prevention

Hose whipping is one of the most serious and common causes of injury in concrete pumping operations. It occurs when a blockage in the delivery line suddenly clears under pressure, causing the end hose to violently and unpredictably whip. It can also occur when the pump is restarted after any stoppage and residual pressure releases through the hose. Most hose whipping injuries are preventable through proper inspection, pressure management, clear communication, and keeping personnel away from the discharge end during stoppages and restarts.

Before Pumping — Inspection Requirements

- Inspect all end hoses before every use for wear, cracking, thinning, bulging, or soft spots — worn hoses are significantly more likely to fail or whip
- Check that all clamps, reducers, and couplings are properly seated, secured, and free of damage
- Verify that no hose is being used beyond its rated working pressure
- Replace any hose that shows signs of wear, damage, or age — do not patch or tape hoses as a substitute for replacement
- Do not kink, twist, crush, or run over hoses with equipment

During Pumping — Operational Requirements

- Whenever the pump is stopped for longer than a few minutes, the operator shall have all personnel move a reasonable and prudent distance from the discharge hose — or, when not practical, reposition the boom to place the hose in a safe location away from workers
- The pump operator must communicate clearly with the pour supervisor before restarting the pump after any stoppage, however brief
- All placing crew members must be aware of and positioned away from the discharge end prior to any pump restart
- Never allow personnel to stand in line with, directly behind, or in the swing path of the end hose during pumping operations
- Reduce pumping pressure when transitioning between hose sizes or reducers

Blockage Response — Highest-Risk Situation

A blocked line is the highest-risk situation for hose whipping. Never increase pump pressure to force-clear a blockage. Follow the procedure below every time.

- If a blockage is suspected, stop the pump immediately — do not increase pressure in an attempt to clear it
- Relieve all line pressure before inspecting or touching any part of the delivery system
- Clear all personnel from the discharge area and the full length of the delivery line before attempting to troubleshoot
- Identify the location of the blockage by working systematically from the discharge end back toward the pump
- Follow the pump manufacturer's approved blockage clearing procedure — never improvise
- Do not re-pressurize the line until all personnel are repositioned at a safe distance from the discharge hose
- After clearing a blockage, perform a controlled restart at reduced pressure and confirm all crew are clear before resuming normal pumping

Communication Requirements

- The pump operator and pour supervisor must establish and maintain clear communication signals before pumping begins — hand signals, radio, or agreed verbal commands
- The operator must confirm all crew are clear of the discharge hose before every startup and restart
- If the operator loses sight of the discharge end or cannot confirm crew position, pumping must stop until communication is re-established
- The pour supervisor is responsible for keeping placing crew members positioned safely away from the hose at all times

6.7 Cleanout Procedures

- Follow manufacturer-approved cleanout procedures for both ball and compressed-air cleanout
- Ensure all personnel are clear of the discharge area during cleanout
- Compressed-air cleanout must follow ACPA compressed air cleanout safety guidelines
- Never exceed rated working pressure during cleanout

6.8 Line Pump Operations

- Inspect all hose connections, clamps, and reducers before each use
- Verify maximum line pressure does not exceed hose and fitting ratings
- Do not use aluminum pipe for high-pressure line pump applications
- Keep all personnel clear of the delivery line during high-pressure pumping

SECTION 7: SILICA EXPOSURE CONTROL PROGRAM

JDE Concrete Pumping will implement engineering controls whenever silica-producing activities occur, in compliance with OSHA 29 CFR 1926.1153. Controls include:

- Wet cutting methods
- Vacuum dust collection systems
- Exposure monitoring
- NIOSH-approved respiratory protection (minimum N95)
- Medical surveillance when required by regulation

All employees performing silica-producing tasks (cutting, drilling, grinding concrete) shall receive silica awareness training prior to beginning work.

SECTION 8: FALL PROTECTION PROGRAM

Fall protection is required at 6 feet or greater above a lower level for all construction operations. Approved systems include:

- Guardrail systems
- Personal Fall Arrest Systems (harness, lanyard, anchor point — rated for applicable load)
- Safety nets

Do not work on open-sided floors, elevated walkways, or elevated platforms without approved fall protection in place.

SECTION 9: EXCAVATION SAFETY PROGRAM

Excavations 5 feet or deeper shall be protected through sloping, benching, trench shields, or engineered shoring systems. Daily inspections by a Competent Person are required. Pump operators shall never position equipment adjacent to an unsupported excavation without engineering approval.

SECTION 10: DRIVER & FLEET SAFETY PROGRAM

All CDL and Non-CDL Drivers Shall

- Complete pre-trip inspections before every shift, documenting findings
- Wear seat belts at all times the vehicle is in motion
- Maintain safe following distances appropriate to vehicle type and load
- Follow all DOT regulations, hours-of-service rules, and weight limits
- Report vehicle defects immediately — do not operate a defective vehicle
- Never use a cell phone while driving except with approved hands-free equipment

Fleet Maintenance — Lockout/Tagout

Before servicing any equipment:

- Isolate all energy sources (electrical, hydraulic, pneumatic, gravity)
- Lock and tag the equipment with your personal lock
- Verify zero energy state before beginning work
- Restore all guards and covers before returning equipment to service

Shop Safety

- Jack stands required whenever a vehicle is raised
- Wheel chocks mandatory on all vehicles being serviced
- Battery safety procedures followed when disconnecting or jump-starting
- Fire prevention measures maintained in shop at all times

SECTION 11: HEAT ILLNESS PREVENTION & COLD WEATHER SAFETY

Heat Illness Prevention

Employees shall be provided adequate water, rest, and shade during all hot weather operations. Supervisors shall monitor workers for signs of heat exhaustion, heat stroke (call 911 immediately), and dehydration.

New employees and those returning from absence shall be acclimatized gradually to hot conditions over 7–14 days.

Cold Weather Safety

Winter operations shall include:

- Cold stress training for all field employees
- Appropriate layered clothing and footwear for ambient conditions
- Scheduled warm-up breaks
- Heated shelters or vehicles available on site when temperatures require
- Monitoring for hypothermia and frostbite symptoms

SECTION 12: FIRST AID PROCEDURES & EMERGENCY CONTACTS

Minor First Aid Treatment

- Inform your supervisor immediately
- Administer first aid; kits are located in the front office and employee lounge
- Note first aid kit usage on the accident investigation report
- First aid is not a substitute for medical attention when professional care is warranted

Emergency Medical Treatment

- Call 911 immediately
- Do not move the victim unless immediate danger exists
- Notify the supervisor as soon as possible
- Preserve the scene for investigation

First Aid Quick Reference

- Wounds — wash with soap and water; cover with clean dressing; apply pressure for bleeding
- Burns (thermal) — rinse with cool water (not ice); cover with sterile gauze
- Burns (chemical/concrete) — flush with cool water for minimum 15–20 minutes
- Eye injury — do not rub; flush continuously with water; cover both eyes if particle is embedded
- Heat exhaustion — loosen clothing, give cool water sips, lie down with feet raised
- Broken bones — do not move victim; splint if victim must be moved

SECTION 13: INCIDENT REPORTING & INVESTIGATION

The following shall be reported to the supervisor immediately: all injuries (no matter how minor), near-misses, property damage, vehicle accidents, environmental releases, and equipment failures.

> **Accident investigation reports must be submitted to the Safety Coordinator within 24 hours of any incident.**

Investigation Procedures

- Implement temporary controls to prevent further injury
- Secure and review the equipment, operations, and processes involved
- Identify and interview each witness
- Investigate causal conditions; base conclusions on facts
- Complete the Accident Investigation Report
- Provide recommendations for corrective actions and additional training needs

SECTION 14: SAFETY COMMITTEE

A Safety Committee has been established to recommend improvements to the safety program and to identify corrective measures for recognized hazards. Responsibilities include:

- Reviewing and updating safety rules based on incident findings and employee reports
- Accepting and addressing anonymous complaints and suggestions from employees
- Evaluating injury and accident records; identifying trends; recommending corrective measures
- Monitoring safety training effectiveness and documentation

Safety committee meetings are held quarterly, and more frequently if needed. Minutes will be posted and maintained for a minimum of three calendar years.

SECTION 15: SAFETY DISCIPLINE POLICY

JDE Concrete Pumping maintains a progressive disciplinary process for safety violations:

- Verbal Warning
- Written Warning
- Final Written Warning
- Termination

Serious violations — including refusal to wear PPE, operating equipment while impaired, or intentionally bypassing safety controls — may result in immediate removal from the jobsite and termination.

SECTION 16: HOUSEKEEPING & GENERAL SAFETY RULES

Housekeeping

- Keep all walkways, exits, and passageways clear
- Do not block access to fire extinguishers or emergency equipment
- Return tools to their storage places after use
- Dispose of waste properly; do not use gasoline for cleaning

Hand Tools

- Inspect tools before use; tag worn or defective tools 'Out of Service'
- Use the right tool for the job; do not use damaged or makeshift tools
- Do not throw tools from one location to another

Ladders

- Inspect ladders before use — no loose rungs, cracked rails, or missing footpads
- Maintain three-point contact when climbing
- Do not stand on the top two rungs of any ladder
- Extend straight ladders at least 3 feet above the landing edge
- Allow only one person on a ladder at a time

Lifting Procedures

- Plan the lift — test load weight, clear the path, get assistance for heavy or awkward loads
- Bend at the knees, not the back; keep load close to body
- Do not twist at the waist — pivot your feet to change direction
- Use mechanical aids (hand trucks, dollies) for heavy or repetitive lifts

SECTION 17: PROGRAM REVIEW

This Accident Prevention Program shall be reviewed:

- Annually by the Safety Coordinator and management team
- Following any major incident or fatality
- Following significant regulatory changes (OSHA, MIOSHA, DOT, ACPA, ASME B30.27)
- Following significant operational changes at JDE Concrete Pumping

SECTION 18: JDE GLOBAL HR — SAFETY RESOURCES

Safety manuals, training videos, and HR resources are available through the JDE Global HR portal. Scan the QR code below to access the portal directly from your mobile device.

JDE Global HR Portal

Access the portal to find:

- Safety manuals and field guides
- ACPA operator training resources
- Required training videos
- HR policies and forms
- Incident reporting forms

Scan with your phone camera or QR reader.

EMPLOYEE ACKNOWLEDGEMENT

I acknowledge that I have received and reviewed the JDE Concrete Pumping Inc. Accident Prevention Program. I understand my responsibility to comply with all safety requirements contained herein as a condition of my employment.

Employee Name (Print)	
Employee Signature	
Date	