

COZEN AND O'CONNOR
TECHNICAL HANDBOOK:
INVESTIGATION AND ANALYSIS OF THIRD PARTY LIABILITY
FOR BOILER, MACHINERY AND EQUIPMENT FAILURES

INTRODUCTION

This manual is intended to assist the claims professional in protecting the insurer's subrogation interests in losses arising from BOILER, INDUSTRIAL MACHINERY & EQUIPMENT FAILURES, including losses caused both by electrical and mechanical anomalies and malfunctions. These frequently complex claims present unique recovery challenges. The machinery or equipment that failed may be old and original purchase records as well as complete repair and maintenance records may be unavailable. Insureds may begin repairs and reconstruction of the equipment before or shortly after notifying the carrier. In such situations, a proper investigation into the cause of the failure may not be possible and evidence crucial to a subrogation claim may be lost or destroyed.

This manual will provide an overview of the subrogation specific issues that often arise with these types of claims. It should serve as a guide to the property and subrogation professional to insure that the evidence necessary for pursuing claims against responsible third parties is gathered and preserved from the onset of the investigation. As with any substantial loss, the adjuster is advised to retain counsel in a timely manner to oversee the investigation of the loss and fully explore subrogation potential.

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A. COMMON TYPES OF LOSSES

There are a variety of claim scenarios that an adjuster may encounter in handling equipment and machinery losses, including:

- (1) failure of industrial machinery or equipment which may halt production in a plant and/or damage other property;
- (2) failure of a turbine generator, with resulting interruption of power;
- (3) failure of an electrical transformer with a resulting power outage or electrically induced fire;
- (4) an electrical anomaly or power surge which impacts the insured's electrical system and electric or electrical equipment, damages other equipment, leads to a loss of power and/or starts a fire;
- (5) failure of a refrigeration or HVAC system which causes death of livestock or spoilage of goods due to loss of ventilation or temperature changes;
- (6) failure of a compressor or pump in a hydraulic system leading to a rupture or release of fluids with explosive force;
- (7) failure of a boiler with catastrophic consequences, including explosive damage and ensuing fires.

B. INVESTIGATION

The adjuster should instruct the insured not to begin repairs until the condition of the machinery or equipment can be examined and documented, and where practicable, the appropriate parties placed on notice of the loss and given the opportunity to examine the damaged items. Generally, an expert, such as a mechanical or electrical engineer, will need to inspect the damaged equipment to determine the precise mode of failure and cause of the loss. Regardless of the specific type of loss at issue, the claims handler needs to act promptly to insure that a proper investigation into the cause of the loss is conducted and to make certain that all relevant evidence and information is identified and collected. Any component parts that are replaced need to be preserved.

1. MACHINERY AND EQUIPMENT LOSSES

To assist any retained experts with their investigation and to enable counsel to evaluate a machinery or equipment loss for subrogation potential, the adjuster should ask the following questions and try to gather the following documents and information from the insured:

(a) INSTALLATION

How old is the machinery or equipment that failed?

Who installed the machine?

Is there a written warranty from the manufacturer/installer?

Was there a written contract with the seller/installer?

Were written or oral start-up instructions provided?

(b) OPERATION

What is the purpose of the machine and how was it being used at the time of failure?

Who was operating the machine at the time of failure?

Where specifically was the operator at the time of failure?

What happened? What was seen, heard, smelled?

Did the manufacturer/seller/installer provide written or oral operating instructions?

Were any written or oral warnings provided prior to the loss?

(c) **MAINTENANCE/REPAIR HISTORY**

Is there a service/maintenance contract or agreement with an outside contractor for the machine?

Is there a preventative maintenance program for the machine?

Was any preventative maintenance recommended by the seller, manufacturer or installer?

Are there maintenance records and invoices?

What was the planned or implemented maintenance schedule for the machine?

Was the machine modified by anyone prior to the loss?

Have any parts of the machine been replaced in the past?

Were there any recent problems with the machine or have repairs been performed?

2. ELECTRICAL EVENTS

When a loss appears to have been caused by an electrical anomaly or malfunction, the adjuster should ascertain the name of the electric utility providing service to the insured, inquire into past problems or unusual occurrences, and gather specific information about any abnormal electrical events immediately preceding the loss. The adjuster also should note the location of any outside meters, power lines and transformers and these items should be inspected for evidence of a failure. In most instances, an electrical expert will be needed to investigate the specifics of the loss and to gather particular information about the utility's electrical distribution system and protective devices.

C. THEORIES OF RECOVERY

1. MACHINERY AND EQUIPMENT LOSSES

In losses involving industrial equipment and machinery, subrogation may be pursued against the manufacturer, seller and/or installer of the equipment as well as any service or maintenance companies who worked on the equipment. Parties may be held responsible under products liability case law or statutes, consumer protection statutes, common law negligence principles, the Uniform Commercial Code or the terms and conditions of any contract with the insured. Subrogation may be pursued for:

(a) ***Manufacturing defects.*** The manufacturer or seller may be liable for supplying a machine with faulty components or for assembling the machine improperly.

(b) ***Defective design.*** The manufacturer or seller may be liable for failing to design the machine with appropriate safety features, such as high temperature or low fluid shut-offs.

(c) ***Improper installation.*** The manufacturer may be liable for failing to provide appropriate installation instructions for the machinery or the installer may be liable for failing to follow the manufacturer's instructions and/or failing to comply with any applicable standards and codes, such as by placing the machinery too close to combustibles or using undersized electrical wiring.

(d) ***Improper repairs or maintenance.*** An outside service company may be liable for failing to inspect, test and repair the machinery in accordance with the manufacturer's specifications and good industry practices.

(e) ***Improper or inadequate operating instructions or warnings.*** The manufacturer, seller or installer may be liable for failing to provide adequate warnings regarding the operation of the machinery and any dangers inherent in its use.

(f) ***Breach of contract.*** The manufacturer, seller, installer and any repair or maintenance company may be liable for the failure of the machinery to operate and perform as promised, pursuant to a written or oral contract.

(g) ***Breach of warranty.*** The manufacturer, seller, installer and any repair or maintenance company may be liable for breach of any oral or written warranties, including a warranty that the machinery was safe and suitable for a particular purpose.

2. **ELECTRICAL EVENTS**

Equipment and machinery may be damaged by electrical malfunctions such as a voltage surge or “out of phase” power. Goods or livestock also may be adversely affected by a loss of power and/or damage to an HVAC system or from the failure of related equipment. Subrogation should be evaluated against an electric utility or electrical/mechanical contractor for the following:

(a) ***Improper placement of a transformer.*** It is well-recognized that there is a danger of fire when a transformer fails due to the flammable insulating fluids (mineral oil) inside the transformer. Accordingly, the National Electric Code requires an installer to consider this risk of fire and to take appropriate safeguards when installing a transformer near a building, such as installing the transformer in a fireproof enclosure,

providing a fire-resistant barrier, automatic extinguishing system and/or maintaining a safe distance between the transformer and any adjacent structures. A utility or independent contractor may be liable for failing to provide such safeguards when a transformer fails catastrophically and ignites an adjacent building.

(b) *Uncoordinated electrical overcurrent protection in an electrical distribution system.* Electrical failures should be expected by utilities. Occurrences such as power lines being damaged during storms are not uncommon. Utilities must provide appropriate protection in the form of fuses and circuit breakers. Fuses and circuits do not prevent electrical failures, instead, they mitigate the damage that can be caused by a failure. Utilities must select and install properly sized fuses in their electrical distribution systems to protect transformers and other equipment from overcurrents or out of phase power, which can cause electrical equipment to overheat and fail, sometimes catastrophically.

(c) *Improper maintenance.* Utilities may be liable for failing to maintain their electrical distribution systems, including the failure to trim tree branches where they may interfere with power lines. Utilities also may be liable for reconnecting power to damaged circuits without confirming that the circuits and attendant electrical equipment are undamaged and functioning properly.

(d) *Improper response to requests for troubleshooting.* Utilities may be liable in certain situations for failing to respond appropriately to a customer's requests for service or repairs.

D. SIGNIFICANT ISSUES AFFECTING RECOVERY

1. ECONOMIC LOSS DOCTRINE

A majority of states have adopted the economic loss doctrine, which precludes a party from bringing a tort action, such as a negligence or products liability claim, to recover strictly economic damages resulting from the failure of a defective product. Economic damages include the cost to repair or replace a defective piece of equipment or machinery and any business interruption loss or extra expenses that result from the failure of the equipment or machinery. In such situations, where a party's damages are solely economic, the party's remedies against a seller are limited to those which were provided in the contract of sale or which exist under the Uniform Commercial Code ("UCC").

The UCC is a national sales code which governs the sale of commercial goods. The UCC may permit recovery for breach of the implied warranty of merchantability or fitness for a particular purpose, or for breach of express warranties. Unfortunately, UCC claims typically must be brought within four years of tender of delivery (i.e., purchase), which precludes claims for products older than four years. Further, the UCC permits sellers to disclaim warranties and strictly limit a party's remedies, which sellers often do in their sales contracts. This may leave a buyer without recourse.

Further, the economic loss doctrine may prohibit a negligence claim against a service provider unless the offending party breached a duty of care which exists independent of the contract. Thus, a party which negligently services or maintains a machine and causes damage to the machine or otherwise causes the insured to suffer economic losses may be immune from a negligence suit. In such cases, the insured would be limited to whatever remedies were provided under the service contract. However, service providers often exclude any implied warranties under their contracts, disavow any liability for consequential damages and limit the applicable period for any warranties.

The harshness of the economic loss doctrine varies state by state. Some jurisdictions allow an injured party to recover for damages to a product itself, while others allow a negligence claim when a product fails suddenly or catastrophically, as opposed to wearing out over time. Nevertheless, even in the more restrictive states, recovery is often permitted for damages to property *other than* the product itself. Thus, when a machine or equipment causes a fire, generates smoke, or releases fluids, recovery for the damages to the *other property* in the premises generally is allowed.

The economic loss doctrine is subject to varied interpretations by courts even within the same jurisdiction. The complexity of this doctrine, and its potential ability to bar or limit even the most meritorious of subrogation claims, demands the early retention of specialized recovery counsel to make sure time restrictions are recognized and recovery opportunities are effectively pursued.

2. SPOILIATION OF EVIDENCE

In recent years, spoliation of evidence has been the subject of increased focus by the courts. Spoliation includes the failure to retain material evidence, alteration of evidence and/or the loss or destruction of evidence. Litigants increasingly are arguing that physical artifacts from a loss site must be preserved and that the unavailability of evidence irreparably prejudices their case. Courts have shown an increased willingness to impose sanctions against offending parties. Such sanctions may include an adverse inference instruction to a jury, the exclusion of certain evidence from trial, and even, in certain circumstances, preclusion of expert testimony, or the outright dismissal of a claim.

To avoid spoliation concerns, it often is advisable to identify potential defendants, place them on notice of a loss and provide them with an opportunity to inspect a loss site or piece of machinery prior to any repairs being conducted. In situations where this is not feasible, due either to severe time constraints or the inability to immediately identify potentially responsible third parties, the claims handler should be certain to photograph and document the loss site thoroughly. This includes recording of fluid levels in a machine, documenting control settings, noting environmental conditions and interviewing operators and maintenance personnel. Further, all components of a machine or equipment that are replaced must be preserved.

3. STATUTES OF REPOSE

Many states limit the period of time for which a seller or manufacturer can be held liable for supplying a defective product. For example, in some states, an aggrieved party cannot bring an action against a manufacturer for supplying a defective product if the product is more than ten years old. The stated policy of these statutes is to prevent a manufacturer or seller from being responsible indefinitely for defects in all of the products that they have made or sold.

A statute of repose is different from a statute of limitation. A statute of limitation typically begins running on the date when the cause of action accrues and sets the period of time within which a lawsuit must be filed. For example, in states with a two year statute for negligence, an action must be must be commenced within two years from the date of loss. A statute of repose, however, sets a time limit from the date of sale of a product for how long the manufacturer or seller can potentially be held liable for a defect in the product. A statute of repose may extinguish a potential cause of action before the loss even occurs. Thus, if an insured purchases a piece of equipment which fails and causes a fire in the eleventh year of operation, there may be no recovery from the manufacturer or seller if there is a ten year statute of repose.

Some jurisdictions also have statutes of repose for the construction of improvements to real property. These statutes may bar a claim against a contractor, architect or engineer for deficient construction of the building, as well as for improper installation of building fixtures. The issue is whether the improvement or fixture will “run” with the property. Factors relevant to this analysis may include the nature of the equipment, its purpose and use, and whether it was purchased separately from the building.

4. OPERATOR ERROR

The adjuster should ascertain the names of all employees operating or observing a machine at the time of failure. These employees need to be questioned about their training and experience and the circumstances surrounding the operation of the machine immediately before the loss. Often, a loss is caused by the operator's failure to follow prescribed procedures, such as maintaining proper fluid levels. Nevertheless, a seller or manufacturer may be liable for failing to provide adequate instructions or warnings to the user or for failing to incorporate appropriate safety mechanisms into the machine.

5. UTILITY TARIFFS

When a loss is caused by a malfunction in equipment owned by an electric utility, such as a transformer or power distribution lines, or by negligent maintenance procedures by the utility, it is necessary to evaluate tariffs that may protect the utility. Tariffs have the force of law. In some jurisdictions, an electric utility is shielded from liability unless the utility was grossly negligent. Some jurisdictions also limit recovery for physical property damage or damages caused by fire, as opposed to economic losses, such as business interruption caused by a loss of power.

The claims professional should be mindful of photographing and documenting evidence of burn patterns around equipment such as transformers, power lines or meters, as well as noting the presence of foreign matter or conductive debris, such as corrosion or carbon tracking.

6. APPLICABILITY OF LIABILITY INSURANCE COVERAGE

Many liability insurance policies do not cover claims against insureds for completed operations or for product failures unaccompanied by damage to other property. In some situations, a responsible party may have a claim against its broker or agent for negligently failing to broker a policy with appropriate coverages. In such situations, the responsible party may assign its right of action against the broker or agent to the prospective plaintiff in exchange for an agreement not to pursue recovery from the defendant's assets.

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