

Wrong place, wrong time!

Be ready when life happens. These solar energy situations illustrate the variety of environmental exposures that could affect your customer!



Improper Stormwater Controls Cause Sediment Runoff

A solar developer begins construction of a 50-acre ground-mounted solar facility on agricultural land. Although the project requires erosion and sediment controls under its stormwater management plan, several controls are either inadequately installed or not maintained following heavy rainfall. During a series of storms, sediment-laden runoff leaves the construction site and enters a neighboring creek and adjacent properties. Local environmental regulators investigate after complaints from downstream landowners about muddy water and impacts to aquatic habitat. The developer faces costs associated with cleanup, regulatory response, environmental monitoring, and third-party property damage claims.



Design Error Leads to Battery Thermal Runaway Event

An engineering firm designs a commercial battery energy storage system (BESS) to accompany a large solar installation. Due to a design error involving battery spacing and ventilation requirements, a thermal runaway event occurs within one of the battery containers several months after commissioning. The resulting fire releases hazardous smoke and combustion byproducts into the surrounding area, prompting emergency response measures and concerns from neighboring businesses. Environmental consultants are retained to evaluate potential contamination from firefighting water runoff and battery-related pollutants. The engineering firm faces professional liability allegations related to the system design, along with environmental response and remediation expenses.



Trenching Damages Sewer Force Main

While installing underground conduit for a utility-scale solar project, a contractor accidentally strikes a buried sewer force main after relying on incomplete utility information. The damaged line releases untreated wastewater that flows onto neighboring properties and into a nearby drainage ditch. Local authorities require immediate containment and cleanup measures, while nearby property owners seek compensation for impacts to their land. The contractor faces pollution-related claims involving emergency response costs, environmental remediation, regulatory scrutiny, and third-party damages.

Solar Energy Claims Scenarios



Environmental Main Office

397 Eagleview Blvd., Ste. 100

Exton, PA 19341

888-828-4320

GAIG.com/Environmental





Transformer Oil Release During Solar Facility Operations

A large commercial solar facility experiences a failure of an electrical transformer located within the project substation. The malfunction causes several hundred gallons of dielectric fluid to escape from the equipment and migrate into surrounding soil and a nearby stormwater conveyance system. Environmental consultants are hired to investigate the extent of contamination and oversee cleanup activities. Regulators require soil removal, confirmation sampling, and reporting. The facility owner incurs substantial costs associated with environmental remediation, disposal of impacted materials, and third-party claims related to the release.



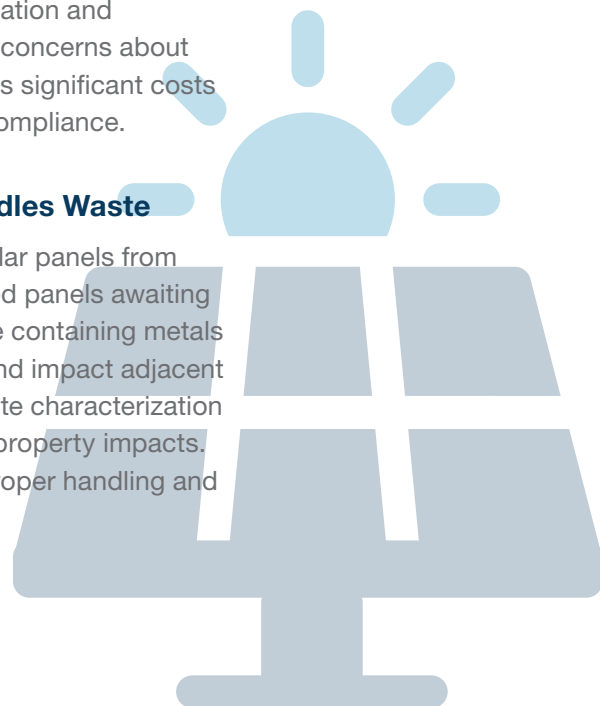
Lithium-Ion Battery Leak at Energy Storage Facility

A battery energy storage facility supporting a renewable energy project experiences a failure within multiple lithium-ion battery modules. Damaged units release electrolyte and other hazardous constituents within the storage enclosure. Although the release is initially contained on-site, subsequent rainfall causes contaminants to migrate beyond secondary containment areas and into surrounding soil. Regulators require investigation and corrective action, while neighboring property owners raise concerns about potential environmental impacts. The facility operator incurs significant costs related to environmental cleanup, testing, and regulatory compliance.



Solar Panel Recycling Contractor Improperly Handles Waste

A contractor engaged to remove and recycle end-of-life solar panels from several commercial installations improperly stores damaged panels awaiting transport. Exposure to weather conditions causes leachate containing metals and other contaminants to escape from the storage area and impact adjacent property. Environmental agencies require cleanup and waste characterization activities, while neighboring businesses pursue claims for property impacts. The contractor faces pollution liability arising from the improper handling and storage of solar waste materials.



Great American
Insurance Company

115+
years
with an **A** or better
rating by
AM Best

Corporate Headquarters
301 E. Fourth Street
Cincinnati, OH 45202

For agent/broker distribution only. The above claim scenarios are provided to illustrate the variety of potential environmental exposures faced by your clients. The facts of any situation which may actually arise and the terms, conditions, exclusions and limitations in any policy in effect at that time are unique. Thus no representation is made that any specific insurance coverage applies to the above claim scenarios. Coverage description is summarized. Refer to the actual policy for a full description of applicable terms, conditions, limits and exclusions. Policies are underwritten by Great American Insurance Company, an authorized insurer in all 50 states and the DC and Great American E&S Insurance Company, an OH domiciled surplus lines insurer eligible to underwrite surplus lines insurance in all 50 states and the DC. This is not intended as a solicitation or offer to sell an insurance product in a jurisdiction in which the solicitation, offer, sale or purchase thereof would be unlawful. © 2026 Great American Insurance Company, 301 E. Fourth St., Cincinnati, OH 45202. All rights reserved. 4190-ENV (09/26)


GREATAMERICAN
INSURANCE GROUP
Environmental