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Explosions - Liability for Damage Caused by Concussion

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EXPLOSIONS—LIABILITY FOR DAMAGE CAUSED BY CONCUSSION

WHEN explosives are lawfully employed and their use reasonably conducted, the courts often find themselves faced with a dilemma where the radiating vibrations cause injury to neighboring property. The right of a party to protection in the use, enjoyment, and exclusive possession of his property encounters the equal right of his neighbor to use his land for any purpose which he may desire so long as it is lawful, and reasonable means are employed; and where the latter utilizes explosives for furtherance of a lawful purpose, the courts have differed as to the theory to be followed in determining liability. Where the explosion casts rocks and debris on to adjoining property no difficulty is found, the great majority of courts[1] holding the actor liable for a trespass. There it is considered that the invasion is direct, and liability is generally established without considerations of due care. It is where the damage is caused by the force of vibrations emanating from the explosion that the decisions split.

Four theories are generally advanced in the various jurisdictions: strict liability for engaging in extra-hazardous activities;[2] trespass, holding that there is no distinction between invasions by concussion and by débris;[3] nuisance;[4] and negligence. And, it seems to be established that Texas allows recovery upon *negligence*, and possibly for nuisance.

The most recent Texas decision on the question is *Stanolind Oil*

[1] 4 SUMMERS, LAW OF OIL AND GAS, 58 (Perm. Ed. 1938); 22 Am. Jur. 180 (1939); 35 C. J. S., 239 (1943).

[2] Exner v. Sherman Power Const. Co., 54 F. (2d) 510 (C. C. A. 2d 1931); Brown v. L. S. Lunder Const. Co., 2 N. W. (2d) 859 (Wis. Sup. Ct. 1942); 4 SUMMERS, *op. cit supra*, note 1 at 62; PROSSER ON TORTS, 448 (1941).

[3] PROSSER, *op. cit. supra*, note 2 at 79; SUMMERS, *op. cit. supra*, note 1 at 62; RESTATEMENT, TORTS, § 158(10) (1934).

[4] SUMMERS, *op. cit. supra*, note 1 at 62, RESTATEMENT, TORTS, § 822, *et seq.* (1939); 46 C. J. S. 651 (1946); 39 Am. Jur. 280 (1942); 31 Tex. Jur. 421 (1934).

& Gas Co. v. Lambert.[5] There, seismograph crews discharged explosives on adjacent lands. Plaintiff had two water wells, which he alleged, had flowed for six years prior to the explosions, but, that immediately after the "shots" the wells sanded in and ceased to flow. The Court of Civil Appeals held that the plaintiff must establish negligence before he could recover.

> "The asserted liability of appellant to appellee must be based on negligence... Proof of the fact that appellee's wells sanded up immediately after appellant had set off certain charges of explosives is insufficient of itself to establish liability."[6]

Whatever criticism may be levelled[7] upon this requirement of negligence, it is adhered to in Texas, whether involving seismographic shots,[8] or blasting to clear a right of way,[9] make cement,[10] or dig telephone pole holes.[11] The rule is most tersely stated in the often cited opinion in *Comanche Duke Oil Co. v. Texas P. C. & O. Co.:*[12]

> "If the purpose be lawful, physical trespass absent, primary use reasonable, and the manner of that use duly careful, consequences are *damnum absque;* otherwise, injury within proximate causation is redressable."

Strict liability, by that name, has received but little encouragement in Texas since the decision in *Turner v. Big Lake Oil Co.*,[13]

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[5] 222 S. W. (2d) 125 (Tex. Civ. App. 1949).

[6] *Id.* at 126.

[7] 4 SUMMERS, *op. cit. supra*, note 1 at 69: "Under the application of this rule the utility of the operator's act is permitted to completely dominate the situation, and the injury to neighboring owners is unredressed. It would be little consolation for them to know that their buildings and improvements have been destroyed with due care and in a scientific manner."

[8] Kennedy v. General Geophysical Co., 213 S. W. (2d) 707 (Tex. Civ. App. 1948) *writ of error refused, n. r. e.;* Seismic Explorations v. Dobray, 169 S. W. (2d) 739 (Tex. Civ. App. 1943) *writ of error ref. want of merit;* Indian Territory Illuminating Oil Co. v. Rainwater, 140 S. W. (2d) 491 (Tex. Civ. App. 1940) *writ of error dism'd.*

[9] Standard Paving Co. v. McClinton, 146 S. W. (2d) 466 (Tex. Civ. App. 1940) *no writ of error requested.*

[10] Universal Atlas Cement Co. v. Oswald, 135 S. W. (2d) 591 (Tex. Civ. App. 1939); *affirmed* 138 Tex. 159, 157 S. W. (2d) 636 (Tex. Com. App. 1941).

[11] Crain v. West Texas Utilities Co., 218 S. W. (2d) 512 (Tex. Civ. App. 1949).

[12] 298 S. W. 554, 560 (Tex. Com. App. 1927).

[13] 128 Tex. 155, 96 S. W. (2d) 221 (1936).

although it has been suggested[14] that Texas courts merely apply it under a pseudonym-"nuisance." Be that as it may, the opinion in the last cited case contained language frequently relied upon to foreclose application of strict liability to the explosion cases:

> "The storage and use of explosives is (are?) clearly within the rule of *Ryland v. Fletcher;* but, as to these, we have also changed from the common law rule, and predicate liability upon negligence, in the absence of controlling statutes or facts so obvious as to constitute a nuisance as a matter of law."[15]

Trespass is generally conceded to arise where entry is made upon land; in explosion cases the distinction is drawn between débris and rocks being hurled upon another's property—a direct invasion, and the intrusion of force in the form of concussion or vibrations—an indirect invasion. Texas, to the consternation of some authorities,[16] apparently joins the minority in refusing to class concussion as a trespass.[17]

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[14] Prosser, *Nuisance Without Fault*, 20 TEX. L. REV. 400 (1942), where it is submitted that Texas has not rejected Rylands v. Fletcher where any other court would have applied it; that the doctrine is relative, turning upon what constitutes "natural" use of the land; and that Texas allows recovery under "nuisance" without resort to negligence.

[15] 128 Tex. 155, 162, 96 S. W. (2d) 221, 224 (1936).

[16] PROSSER, *op. cit. supra*, note 2 at 80: "... a marriage of legal technicality with scientific ignorance.... It has no justification in the laws of physics or in common sense ..." Judge Hand, in Exner v. Sherman Power Const. Co., 54 F. (2d) 510 (C. C. A. (2d) 1931): "Yet in every practical sense there can be no difference between a blasting which projects rocks in such a way as to injure persons or property and a blasting which, by creating a sudden vacuum, shatters buildings.... In each case a force is applied by means of an element likely to do serious harm if it explodes. The distinction is based on historical differences between the actions of trespass and case and, in our opinion, is without logical basis." *Cf.* 4 SUMMERS, *op. cit. supra*, note 1 at 68: "In many cases of injury by vibration the physical invasion might well be considered an entry upon land, but certainly every vibration of a neighbor's land is not a trespass. Where is the line to be drawn? If at the point where the vibrations cause appreciable physical injury, such line coincides with the actor's liability for consequential injury."

[17] Kennedy v. General Geophysical Co., 213 S. W. (2d) 707 (Tex. Civ. App. 1948) *writ of error refused, n. r. e. Cf.* dicta by Judge Alexander in Universal Atlas Cement Co. v. Oswald, *supra*, note 10 at 593, where negligence was established, making the observation unnecessary: "... but in cases like the one at bar where the parties own adjoining property, and one of them intentionally sets off an explosion that rends the earth under the premises of his neighbor, there is an actual physical destruction of the property of the adjoining owner, and it would appear to be more reasonable to hold that the one who set off the blast should be liable for the damages caused thereby, regardless

Nuisance is a field of tort liability which is concerned with the type of interest invaded rather than the quality of the conduct involved, and generally, when the fact of nuisance is established, it is of little import whether the conduct is intentional, negligent, or the result of ultra-hazardous activities.[18] Whether or not a recovery for nuisance could be had in Texas for damages resulting from concussion without proof of negligence is, nevertheless, not too clear. There is language[19] which seems to imply that negligence is not a necessity for recovery in nuisance cases. And, an Oklahoma case[20] has distinctly allowed recovery for damages caused by vibrations from fly-wheels on a casinghead gas booster station on grounds of nuisance and without recourse to negligence. But, in what appears to be the single Texas decision in point, *City of Dallas v. Newberg*,[21] where concussion from blasting allegedly damaged plaintiff's home, recovery was denied, although there was some confusion as to whether or not plaintiff's residence had actually been damaged. The language of the opinion would seem to support liability without negligence where the act constitutes a nuisance, but it is, at most, doubtful whether the case promises new vistas for injured parties.

The tremendous role which explosives play in the oil industry's exploratory process cannot be overstated, nor can the value of oil to a modern nation be conservatively assessed. With these economic considerations bearing forcibly upon the *utility* of an operator's conduct, the difficulty of establishing nuisance would seem to foreclose that form of relief. Therefore, it is submitted

of negligence, in the same manner as he would if he should invade the premises by the throwing of stones."

[18] 46 Cor. Jur. 651; 39 Am. Jur. 280; PROSSER, *op. cit, supra*, note 2 at 553 *et seq.*

[19] Columbian Carbon Co. v. Tholen, 199 S. W. (2d) 825 (Tex. Civ. App. 1947) *writ of error refused*, at 828: "To state the distinction another way, it is only where an act or condition can become a nuisance solely by reason of the negligent manner in which it is performed that no right of recovery can be shown independently of existence of negligence..."

[20] Phillips Petroleum Co. v. Vandergriff, 122 P. (2d) 1020 (Okla. Sup. Ct. 1942), citing and relying on Fairfax Oil Co., v. Bolinger, 186 Okla. 20, 97 P. (2d) 574 (1939) (vibrations arising from drilling an oil well).

[21] 116 S. W. (2d) 476 (Tex. Civ. App. 1938) *writ dismissed.*