Case Name:

Plas-Tex Canada Ltd. v. Dow Chemical of Canada Ltd.

Between
Plas-Tex Canada Ltd., Plastex Pipeline Systems Ltd., Plastex Profiles Ltd., Plastex Extruders Ltd., and Jaycan Construction Ltd., respondents/plaintiffs, and Dow Chemical of Canada Limited, appellant/ defendant), and Alberta Opportunity Company, Canadian Standards Association, and Her Majesty the Queen in Right of Alberta, Not party to the Appeal/defendants

[2004] A.J. No. 1098

2004 ABCA 309

245 D.L.R. (4th) 650

[2005] 7 W.W.R. 419

42 Alta. L.R. (4th) 118

357 A.R. 139

4 B.L.R. (4th) 194

27 C.C.L.T. (3d) 18

135 A.C.W.S. (3d) 75

2004 CarswellAlta 1290

Docket No.: 0301-0031-AC

Alberta Court of Appeal
Calgary, Alberta

Conrad, O'Leary and Picard JJ.A.

Heard: January 13, 2004.
Judgment: October 14, 2004.

(149 paras.)

Commercial law -- Sale of goods -- Fitness and quality -- Merchantable quality -- Warranties -- Contracts -- Consensus, lack of -- Unconscionable transactions -- Tort law -- Negligence -- Causation -- Foreseeability and remoteness -- Duty of care -- Standard of care -- Damages -- General damages -- Categories of -- Loss of profits.

Appeal by the defendant, Dow Chemical, against the plaintiffs, the Plas-Tex group of companies, from a trial decision awarding damages for breach of contract and negligence. The plaintiffs were affiliated companies providing pipeline systems to carry natural gas to rural co-ops. They shared common ownership, management and goals. Dow sold defective resin to two of the plaintiffs. Dow did not have a contractual relationship with the other plaintiffs. One of the contracts contained clauses limiting Dow's liability by stating that the plaintiff accepted all liability for loss or damage resulting from use of the resin. Dow knew that that the resin was defective and that some plaintiffs would use the resin to manufacture pipe installed by other plaintiffs to carry natural gas. The pipe was dangerous and allowed natural gas to escape. The plaintiffs were forced to undertake major remedial operations and use of the pipe was eventually prohibited. The plaintiffs' reputation was damaged, which caused it to lose some of its customers and be petitioned into bankruptcy. The trial judge found Dow liable in contract and tort. The plaintiffs were awarded damages for the purchase price of the resin, cost of pipe repairs and lost profits.

HELD: Appeal dismissed. Dow breached implied warranties under the Sale of Goods Act. Dow was in fundamental breach of the contract with the plaintiff and could not rely on the limitation of liability clauses. The contract was unconscionable. Before signing the contract with the plaintiff, Dow knew that defects in the product would cause the pipe manufactured from it to fail. Rather than disclosing this knowledge, Dow protected itself with limitation of liability clauses. While the relationship between the plaintiffs could not support an exception to the doctrine of privity of contract, it did support an award for loss of profits to the plaintiffs as a unit in tort. Dow knew of the corporate structure of the plaintiffs and their working relationships. Dow had a duty to warn all the plaintiffs of the resin dangers and to take reasonable care not to distribute a dangerous product. There was a reasonable foreseeability of harm to each plaintiff and no policy reason to limit the duty of care. In the absence of fraud or wrongdoing, the plaintiffs were entitled to organize their business to lessen risk and protect resources without prejudicing their right to claim against wrongdoers. It did not matter that Dow had a contractual relationship with certain plaintiffs but not others. Dow breached the standard of care. The receivership of all the plaintiffs was a reasonably foreseeable economic loss. There were no policy reasons why Dow should not be liable for the costs of repairs and loss of profits the plaintiffs suffered. The cost of the resin, cost of repairs and lost profits did not constitute double recovery. The losses were complementary.

Statutes, Regulations and Rules Cited:

Alberta Opportunity Fund Act, S.A. 1972, c. 11.

Sale of Goods Act, R.S.A. 2000, c. S-2, s. 16(2), 16(4).

Appeal From:

On appeal from the Judgment by The Honourable Mr. Justice McIntyre. Dated the 17th day of December, 2002. Filed on the 28th day of January, 2003. (2002 ABQB Docket: QC01-125376)

Counsel:

J.P. McMahon for the Respondents/Plaintiffs

E.P. Groody and J.T. Eamon for the Appellant/Defendant

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REASONS FOR JUDGMENT

Reasons for judgment were delivered by Picard J.A. Concurred in by Conrad J.A.. Concurred in by O'Leary J.A.

PICARD J.A.:--

INTRODUCTION

1 The appellant, Dow, is a large petro-chemical company. The respondents were affiliated companies providing pipeline systems to carry natural gas to rural co-ops. Dow sold defective polyethylene resin to two of the respondents. It knew of the defect before it sent the first shipment but did not advise the respondents. It also knew that some respondents would be using the resin to manufacture pipe that would be installed by other respondents and that the pipe would carry natural gas throughout rural Alberta. The pipe produced with the defective resin was dangerous because it cracked, allowing natural gas to escape. There was an explosion and the frequency of leaks from the pipe soared. The respondents were forced to undertake a major remedial and repair program. The respondents sought assistance from Dow but were refused. The production and installation of the pipe was 80% of the respondents' business. They lost customers, and their reputation deteriorated. Eventually, the provincial government prohibited use of the pipe. The respondents were left with large receivables and were unable to meet commitments. Two banks petitioned the respondents into bankruptcy.

2 The trial judge found Dow liable in both contract and tort and awarded the respondents damages for the purchase price of the defective resin, cost of repairs of the dangerous pipe, and for lost profits.

3 Dow never did warn the respondents about the defective resin, although it admitted in the lawsuits against its insurer that the resin was "inherently defective" and "intrinsically harmful".

4 I find that the trial judge came to the correct result and uphold his damage award but find reviewable error in part of the legal analysis.

FACTS

5 There are a number of features of the history of this case that make it unusual. Firstly, this litigation was begun 28 years ago. Secondly, Dow has been extensively involved in litigation as a result of the defective resin and settled claims by the government of Alberta, gas co-operatives, and gas supply companies. An American court dealing with Dow's litigation against its insurers noted that all but this case had been resolved. Thirdly, at this trial, Dow called no evidence. Fourthly, the trial judge did an extensive analysis in oral reasons (104 pages) that are not reported.

6 There are also two important characteristics of the legal relationships that affect the analysis for

liability. The first is the role played by the Alberta Opportunity Company and the second is the corporate structure of the respondents.

a) Role of the Alberta Opportunity Company

7 The Alberta Opportunity Company (AOC) was created by the provincial government to administer a fund to promote the development of resources and the growth and diversification of the economy of Alberta: Alberta Opportunity Fund Act, S.A. 1972, c. 11.

8 In 1973, one Alberta government venture that AOC was involved with was the rural gas program. Anticipating a shortage of plastic resin as a result of rising global demand and the increased need for plastic pipe to use in the rural gas initiative, AOC sourced Dow as a supplier of polyethylene resin to Alberta pipe extruders, including the respondents. AOC set up a system of financial and supply arrangements so that the respondents could manufacture and supply pipe for use in the rural gas initiative. This meant that in the early stages AOC was a conduit between the appellant and respondents. Prior to trial, Dow agreed to assume all of AOC's liability or responsibility, which allowed AOC to step out of this action. AOC's liability thus became Dow's liability.

b) Corporate Structure of the Respondents

9 There are five respondent companies. They shared common ownership, management and a common goal: to be a fully-integrated provider of natural gas systems to rural gas co-ops. The main distinguishing feature was that each fulfilled a different function in the business venture that started with the resin and ended with the delivery of a fully functional natural gas system. There were no formal written agreements amongst the companies but inter-company transactions were documented. The linkages between the companies meant that there was an internal reciprocal dependency that was dealt with by a charge-back system. During the time in issue, there was a re-organization of the companies with four of the respondents becoming wholly owned subsidiaries of the fifth.

10 Prior to the re-organization, the group of companies consisted of Plas-tex Pipeline Systems Ltd. (PPSL), Plas-tex Extruders Ltd. (Extruders) and Carleton Distributors Ltd. (a warehousing distributor of materials and equipment for the gas industry but not involved in this appeal. Extruders, established in 1969, manufactured natural gas pipe using resin from several different suppliers. PPSL, established in 1973, supplied natural gas systems. These turn-key systems included the design, engineering, materials, construction and mapping of a natural gas system. PPSL entered into contracts with the rural co-ops to supply them with such gas systems and warranted their work and materials for one year.

11 On December 31 1974, the respondent Plas-Tex Canada Ltd. (Plastex) was created and it acquired 100% of the assets of Extruders, which became inactive. Plastex Profiles Ltd. (Profiles) was set up as a wholly owned subsidiary of Plastex and took over the work that had been done by

Extruders. Jaycan Construction Ltd. (Jaycan) was formed as another wholly owned subsidiary to assist PPSL which was 70% owned by Plastex, in the construction of pipelines. PPSL also did design and engineering for the pipelines. Plastex provided management and financial services to all of the respondents. That was the corporate structure when all respondents were forced into receivership in September 1976.

c) Supply of Resin

12 Dow supplied resin in three stages. The first was a small sample shipment in March 1974. The second began on July 17, 1974. Both were set up with Dow as the vendor, AOC as the conduit purchaser, and Extruders as the ultimate purchaser. At this point, there was no single contract in writing but a series of purchase orders.

13 The third was pursuant to a contract in writing dated February 15, 1975, between Dow and Profiles, for supply of resin during the period January 1, 1975, through December 31, 1977. That contract contained several clauses that limited Dow's liability, including that: Profiles assumed all responsibility and liability for loss or damage arising from the use of the resin; Dow's liability was limited to the selling price of the resin; failure of Profiles to give Dow notice in 30 days constituted unqualified acceptance and waiver of all claims and the lack of such notice constituted unqualified waiver, and finally that the contract set out the entire understanding between the parties.

d) Defects in the Resin

14 On July 15, 1974, Dow became aware of serious defects in the resin. Two days later, on July 17, 1974, it shipped the first commercial shipment to Extruders without warning Extruders of the risk that the defect presented.

15 An internal Dow document dated July 15, 1974, stated that: (a) tests on the resin had identified that it had a chemical deficiency; (b) "more and more of the customer difficulties" were attributable to that deficiency; (c) "[f]or the past few months off grade' [resin] has been sold to our customers"; and (d) "[w]hatever the reasons for the [chemical deficiency in our resin] may have been, I urge that top priority be given to ensuring that continuous addition of [the deficient chemical] to our resins at the levels recommended take place". The trial judge noted further Dow reports detailing the deficiencies in the resin dated: August 19, 1974; November 11, 1974; February 10, 1975; May 10, 1975; and August 5, 1975. Dow ceased selling the resin in July 1975.

16 The levels of antioxidant in the resin were significantly below industry standards and there was no evidence that adequate changes were ever made. Indeed Dow was not prepared to acknowledge that there was a problem. However, the expert evidence at trial was that the resin was "inherently defective" and "unsuitable for gas pipe". Pipe made from the defective resin was brittle and, as a consequence, cracked.

e) Use of the Defective Resin

17 Extruders, at first, and later Profiles, using the defective resin, manufactured pipe and provided it to PPSL which, along with Jaycan, constructed pipelines to supply gas to the rural co-ops in Alberta.

18 By January 1975, over 1,700 miles of pipe manufactured from Dow's resin had been installed underground. In total, about 3,000 miles of pipe, using more than 1.3 million pounds of Dow resin, was manufactured and installed by the respondents pursuant to the rural gas program.

f) Consequences of the Defective Resin

19 The installed pipe cracked and leaked. There was property damage not only to the pipe but to land. Gas escaped and was lost. In one case, pipe exploded. The nature and extent of damage was described by the American trial judge adjudicating Dow's claim against its insurer flowing from its liability in other actions similar to this one. He found that the categories of property damage were: (i) pipe that was destroyed and discarded prior to and during the installation; (ii) installed pipe that was replaced and discarded when repairs were made; (iii) all pipe in the ground when the replacement programs were undertaken; (iv) all unused pipe; and (v) all escaped gas: Associated Indemnification Corporation v. Dow Chemical Company, 814 F. Supp. 613 (E.D Michigan 1993) at 622 (the US decision). As the respondents did not know of the source of the defect in the resin, they accepted responsibility for the problems under the one year warranties and undertook extensive testing and repairs.

20 In mid-1976, the Canadian Standards Association (CSA) and the Alberta Energy Resources Conservation Board (ERCB) banned the use of gas pipe made from the resin because of the danger and risks it presented to workers and the public.

21 By this time, customers were refusing to pay the respondents and over $1.2 million in accounts receivable had accumulated. The customers were demanding refunds for all unburied pipe that they held in inventory. At this time, the respondents filed the Statement of Claim against Dow.

22 In September 1976, all of the respondents were placed into receivership by their two secured lenders and they ceased all operations. All the companies were liquidated and, in 1984, were released from receivership.

g) Other Litigation

23 In 1978, the ERCB directed that all the pipe that had been made from Dow's resin be replaced. The cost was approximately $27 million. A consolidated action by the government and the 38 rural gas co-ops against Dow for recovery of these costs was settled in November 1990. This case was not included in that settlement.

24 In 1993, Dow claimed and was granted indemnification by its insurer for the amount of that

settlement: see the US decision. Documents from that litigation, acknowledged by Dow as containing statements made with its authority, were made part of the record in this case as business documents. In the course of that litigation, Dow admitted that the resin was "intrinsically harmful" and that the resin was responsible for all of the problems that occurred with the pipe. As noted by the trial judge in this case, Dow stated in argument in the US case: "we are liable because the resin screwed up".

WHAT THE TRIAL JUDGE FOUND

25 The trial judge found liability based on both contract and tort.

a) Liability in Contract

26 The contractual liability flowed from the two contracts: the contract with Extruders in which AOC played a part; and the contract in writing between Dow and Profiles that commenced January 1, 1975.

27 The trial judge found that the sales under the Extruders contract were subject to the requirements of the Sale of Goods Act, R.S.A. 2000, c. S-2 (SOGA) and that there were breaches of the implied conditions of fitness and merchantable quality for which Dow was liable. He went on to find that Dow was in fundamental breach of the written contract with Profiles and that the clauses in that contract limiting its liability were unenforceable.

28 He was able to find breach of contract by Dow against all respondents. He dealt with privity based on the fact that Dow knew of the corporate structure and the relationship amongst the companies and on his conclusion that there could have been claims up through the chain of companies right back to Dow.

b) Liability in tort

29 He also found that Dow had a duty in tort to warn the respondents and was negligent in failing to do so. He found that the "trigger" for the respondents' financial difficulties and eventual receivership was the failure of the pipe made from the defective resin.

c) Damages

30 For purposes of assessing damages, the trial judge concluded that there was a single entity that he called the Plastex Group that was comprised of all respondents. The damages awarded were: a refund of the purchase price of the defective resin ($576,958); the cost of repairing the dangerous pipe ($291,000); and economic loss because of loss of profits prior to and as a result of the respondents being petitioned into bankruptcy ($1,916,500). The trial judge found all were foreseeable and directly attributable to the supply by Dow of the defective resin.

WHAT THE APPELLANT APPEALS

31 The appellant alleges that the trial judge erred in his findings in respect of:

1. the contract with Extruders, in that finding the sales were subject to the provisions of the Sale of Goods Act which imply conditions of fitness and merchantable quality;
2. the written contract with Profiles, in finding that the limitation of liability clauses were not enforceable;
3. liability in tort, in finding that Dow owed the respondents a duty of care; and
4. damages, in finding that Extruders and Profiles suffered a loss and were entitled to a refund of the purchase price of the resin, and in awarding the respondents compensation for lost profits.

STANDARD OF REVIEW

32 In its appeal, Dow alleges the trial judge made errors of fact, of law, and of mixed fact and law. As the role of an appellate Court is not to re-try a case, this Court must ensure that where an error on the part of the trial judge is alleged, the findings of the trial judge are granted the appropriate deference. The appropriate deference that appellate judges must give to findings of fact, law and mixed fact and law by trial judges was set out in Housen v. Nikolaisen, [2002] 2 S.C.R. 235, 2002 SCC 33.

33 Summarized briefly, the standard of review for a question of law is one of correctness: Housen, supra at para. 8. The standard of review for findings of fact is such that only where a trial judge makes a palpable and overriding error should an appellate Court overturn a finding of fact: Housen, supra, at para. 10. Where a matter involves a question of mixed fact and law, such as a finding of negligence, it will be important to characterize the issue as one that lies closer either to fact or to law. One way to determine whether an issue is closer to one of fact or of law, is to ask whether a legal principle is readily extractible: Housen, supra at para. 36.

34 The degree of deference to be accorded by an appellate Court to a trial judge's assessment of damages is high. An appellate Court is not to substitute its assessment of damages for that of the judge or jury. An award of damages is not to be interfered with unless the trial judge applied the wrong principle of law or the overall amount is a wholly erroneous estimate: Herron v. Hunting Chase Inc. (2003), 330 A.R. 52, 2003 ABCA 219 at para. 38.

35 These are the standards of review that must be applied to the grounds of appeal.

ANALYSIS

BREACH OF CONTRACT

a) The Contract: Dow and Extruders (and AOC)-March to December 31, 1974.

(1) s. 16(2) Sale of Goods Act

36 Purchases were made by Extruders using purchase orders, with AOC as a conduit. These were treated by the trial judge as one contract and no issue was taken by the parties with this characterization.

37 The trial judge held that s. 16(2) of the SOGA applied. This section says that where a buyer makes known to the seller the particular purpose for which goods are required, so as to show that the buyer relies on the seller's skill and that the goods are of a description that the seller supplies, there is an implied condition that the goods are reasonably fit for that purpose. In his analysis of s. 16 (2) the trial judge noted that, in order for the warranty to be implied, three conditions must be met. Specifically, the goods must have been sold in the course of the seller's business, the seller must have known the purpose for which the goods were purchased, and the purchaser must have relied on the seller's skill or judgment.

38

Dow, at trial, and on this appeal, takes issue with the first and third condition. While there was no basis upon which Dow could argue that it was not in the business of selling resin, Dow argued that AOC was not in the business of doing so because it acted solely as a banker and was an arm of government. The trial judge found that AOC did sell and distribute resin but also characterized Dow as "the ultimate seller". At trial, Dow acknowledged that AOC was merely a conduit. Given this admission and the fact that Dow has assumed all liability on the part of AOC in this case, Dow cannot shelter behind AOC. Even if the trial judge erred in his finding regarding AOC, there is no error in the finding that Dow was in the business of selling resin.

39 Dow says that it was an overriding and palpable error to find that Extruders relied on AOC's skill and knowledge about the resin. More importantly, it says there was no such reliance on it. As the evidence showed, and the trial judge found, Dow provided all the technical advice about the resin to the Extruders and knew that the resin would be used to manufacture pipe to transport natural gas. The trial judge found that all parties were aware that it was Dow who knew the properties of the resin and its proposed use. The trial judge made no error in finding, as a fact, that there was reliance as required by the SOGA. The defective resin that Dow was in the business of selling was not fit for the purpose of being made into pipe that could safely carry natural gas. Therefore there was a breach of contract under s. 16(2) SOGA for which Dow is liable.

(2) s. 16(4) Sale of Goods Act

40 The trial judge also held that s. 16(4) of the SOGA applied and was breached. This section provides that where goods are bought by description from a seller who deals in goods of that description, whether the seller is the manufacturer or not, there is an implied condition that the

goods are of merchantable quality. The trial judge found that the "goods", the resin, was referred to throughout the parties' dealings as "high density polyethylene N5303" and was therefore bought by description. Clearly, Dow was a seller that dealt in "goods" of that description. The trial judge decided that the implied warranty of merchantability applied to the sales of the resin, N5303.

41 Dow argued that this warranty was not breached because Extruders failed to prove that the resin could not be used for any purpose other than producing pipe that carried natural gas. Interestingly, in the proceedings leading to the US decisions, Dow stated that N5303 resin was designed exclusively for the manufacture (extrusion) of pipe to carry natural gas for the rural gas program and that the product had no other application. In any case, Dow knew of the proposed use of the resin and that the pipe created from it would and did crack, allowing the escape of natural gas. Dow's argument that such pipe could still carry water or brine, especially since there was no evidence to support it, has no merit. Given the very dangerous consequences of transporting natural gas through pipe that would crack, the trial judge did not err in finding that no reasonable buyer aware of the defects of pipe made with the resin would have bought it at any price.

42 Thus, Dow is also liable for the breach of contract under s. 16(4) of the SOGA.

43 In summary, the trial judge was not in error in finding that s. 16(2) and (4) applied to the contract with Extruders, that these warranties were breached by Dow, and that Dow was liable either directly or on the basis that it had accepted all liability of AOC.

b) The Written Contract and Limitation of Liability Clause: Dow and Profiles--January 1, 1975 to December 31, 1977

44 The written contract between Dow and Profiles, although not signed until late February 1975, took effect from January 1, 1975 through December 31, 1977. The contract included clauses that limited Dow's liability by stating that Profiles accepted all liability for loss or damage resulting from use of the resin.

45 The trial judge concluded that there had been a fundamental breach of this contract because Profiles did not get what it contracted for and "[m]ore significantly, [the resin] was completely unsuitable for use as [natural gas pipeline]". Further, he found as fact that Dow, a sophisticated chemical company, knew the purpose for which the resin was to be used, had trouble meeting its own chemical requirements in formulating the resin, and knew of the problems with the resin before it entered into the contract with Profiles. Dow acknowledged in its factum that it did not appeal these findings of fact.

46 The trial judge also found that there was an inequality in bargaining power of the parties because Dow, a sophisticated chemical company with complete knowledge of the formulation of the product (which it refused to share at a later ERCB inquiry), "knew that there were significant problems with the resin and did not disclose those concerns to the Plas-Tex Group". Therefore, he found that Dow could not rely on the clauses in the contract that limited its liability and that Dow

was liable for breach of the contract.

47 Dow argues that in order to find limitation of liability clauses unenforceable, there must be "grievous impairment of bargaining power or other instances of unfairness or unreasonableness" and that those did not exist in this case.

48 Whether a breach of contract is a fundamental breach that deprives the breaching party of the benefit of any limitation of liability clause in the contract is a question of construction: Guarantee Co. of North America v. Gordon Capital Corp. [1999] 3 S.C.R. 423 at para. 52. In Alberta, the construction of contractual terms is an issue of law: Western Irrigation District v. Alberta (2002), 312 A.R. 358, 2002 ABCA 200 at para. 17. Findings of law are reviewed on a standard of correctness.

49 Alberta Courts have generally held that contracts should be enforced regardless of the stringency of their terms limiting liability because parties require certainty that negotiated provisions in a contract will be legally enforceable: see for example, Catre Industries Ltd. v. Alberta (1989), 99 A.R. 321 (C.A.), Canadian Fracmaster Ltd. v. Grand Prix Natural Gas (1990), 109 A.R 173 (Q.B.). However, this principle is subject to an important caveat: the court will intervene when the party desiring to enforce a liability limiting clause has engaged in unconscionable conduct.

50 In Hunter Engineering Co. v. Syncrude Canada Ltd. [1989] 1 S.C.R. 426, the Court determined that, as a result of a fundamental breach, the limited liability clauses contained in that contract protecting the breaching party were enforceable, but the five member Court was divided in its reasons. In Guarantee, supra another five member Court appeared to reconcile the two views by concluding that both views in Hunter affirmed that the decision as to whether a party is prevented from relying on a limited liability clause is not a matter of law but a matter of construction. Further, the Court found, that the only limitation on enforcing a written contact, in the event of a fundamental breach, would be to refuse to enforce the limitation of liability clause in circumstances where to do so would be either unconscionable, according to Dickson C.J., or unfair, unreasonable, or contrary to public policy, according to Wilson J.

51 Waddams has opined that the difference between unconscionable and unfair, unreasonable or otherwise contrary to public policy is "unlikely to be large": Waddams, S.M., The Law of Contracts, 4th Ed., (Toronto Canada Law Book, 1999) at 349. Dickson C.J. in Hunter held at 462 that unconscionability "might arise from situations of unequal bargaining power".

52 The cases of Olshaski Farms Ltd. v. Skene Farm Equip. Ltd. (1987) 49 Alta. L.R. (2d) 249 (Q.B.), Bryandrew Holdings Ltd. v. Sifton Properties Limited (1994), 38 R.P.R (2d) 95 (Ont. Gen. Div.) and Atlas Supply Co. of Canada Ltd. v.Yarmouth Equipment Ltd. (1991), 103 N.S.R. (2d) 1 (C.A.), also provide, in similar cases, some guidance on what constitutes "unconscionability". The courts in those cases concluded that if a defendant (a) knew of a possible risk associated with its product, (b) failed to disclose important assumptions within its knowledge thereby preventing the other party from properly measuring the consequences and risks they were undertaking (c)

deliberately withheld information and induced the claimant to enter the agreement on the basis that the other party had "scientifically done their homework", this would prohibit the defendant from relying on the limited liability clauses in the contract.

53 These cases reinforce the principle that unconscionability should be used sparingly to avoid an exclusionary clause. However, such cases also establish that a party to a contract will not be permitted to engage in unconscionable conduct secure in the knowledge that no liability can be imposed upon it because of an exclusionary clause.

54 In this case, Dow knew that defects in its product would cause the pipe manufactured from it to fail. Further, it knew that the respondents and others would be burying the pipe in order to supply natural gas all over rural Alberta. Common sense says that anyone would know that cracking of such pipe could result in potential danger to property and persons. Dow was aware of all this before it made the first commercial shipment in July 1974. Moreover, by the time it signed the contract with Profiles, some seven months later, it had significantly more detailed information about the nature of the defect and the pipe's propensity for early failure. Dow also knew that the CSA was considering decertifying its resin. Rather than disclosing this knowledge to Profiles and other sister companies that were using the pipe made from the resin, Dow chose to protect itself from liability by inserting liability limiting clauses in its contract with Profiles.

55 There can be no doubt that this conduct was unconscionable. The trial judge committed no reviewable error in finding that Dow was prevented from relying on the limitation of liability clauses in the contract with Profiles. It is important to note that, even had the attempt by Dow to limit is liability been successful, it would only have limited the damages claimed by Profiles.

c) Conclusion on the Contract Actions

56 In summary, the trial judge made no reviewable error in finding that s. 16(2) and (4) applied to the contract with Extruders, and that Dow was liable directly, or on the basis that it accepted all liability of AOC.

57 I also find that the trial judge made no error in determining that Dow was in fundamental breach of the contract with Profiles and that the exclusion of liability clause in the contract was unenforceable.

58 Extruders paid $299,940 for the resin that it purchased and Profiles paid $277,468. In total, $576,958 was awarded by the trial judge for the cost of purchasing the defective resin. Dow takes no issue with the quantum of these claims.

59 The issues of whether these contractual breaches can be extended beyond Extruders and Profiles to all of the respondents, and Dow's position that allowing damages for the cost of the resin would be to allow for double recovery, will be dealt with as separate issues.

BASIS OF LIABILITY

a) Concurrent Liability

60 The trial judge found concurrent liability in contract and tort. He correctly recognized the principles from BG Checo International Ltd. v. British Columbia Hydro and Power Authority, [1993] 1 S.C.R. 12 which was affirmed in Royal Bank of Canada v. W. Got & Associates Electric Ltd. [1999] 3 S.C.R. 408 that state that where a given wrong supports an action both in contract and in tort, a party may sue in either or both with the only limit on a party's right to sue in tort being the right of the parties to restrict their liability in tort through an effective limitation of liability clause in the contract.

61 Dow did attempt to limit liability in that way but it was ineffective because the trial judge correctly found that the contract was fundamentally breached and the limitation clause was unenforceable.

62 Where there is concurrent liability, the measure of damages should be the same. In Canlin Ltd. v. Fibres Canada Ltd. (1983), 40 O.R. (2d) 687 at 690-691, Cory J.A. (as he then was) stated that, in awarding damages for foreseeable losses, there is no difference whether the claim is founded in contract or in tort: see also Asamera Oil Corp. v. Sea Oil and Gen. Corp., [1979] 1 S.C.R. 633 at 646-647. The Supreme Court of Canada has confirmed that in situations of concurrent liability it would seem anomalous to award different levels of damages for what is essentially the same wrong on the basis of the form of action chosen. BG Checo, supra at 42. The trial judge did consider whether there would be a difference in the measure of damages that could be awarded under tort as compared to contract and said there should not be.

b) Damage Award to Respondents as a Unit

63 The trial judge found it appropriate to award all damages to the respondents as a unit. He realized that Dow did not have privity of contract with all of the respondents. He noted, however, that the respondents were in a position to sue each other and could be seen as "on-selling" a defective product and he concluded that damages could be "considered in light of the inter-company relationships". He found support for his analysis in an English case, Global Marine Projects Ltd. v. Colvic Craft plc, [1998] E.W.J. No. 4468 (Eng. & Wales C.A.) (QL)

64 Dow's challenge to that analysis in contract and the applicability of Global has some merit. In any case, in view of Dow's liability in tort, assessing damages in contract adds nothing. While the symbiotic relationship of the respondents could not, in law, support an exception to the requirement of privity, it does, in this case, support an award for loss of profits to the respondents as a unit in tort. All respondents were wholly-owned subsidiaries of Plastex and operated in an inter-dependent fashion, each contributing a product or service to the system sold to the ultimate consumer. This was described by the parties as a "turn-key gas system". Extruders had been subsumed within Profiles and Jaycan created by the reorganization in December of 1974. Dow knew of the corporate

structure of the respondents and their working relationships. The respondents were put into receivership as a group. The expert evidence supported no conclusion other than that they had to be considered as one unit for the assessment of loss of profits. The trial judge had no evidence of the loss of each respondent as a separate entity. As regards the appropriateness of awarding one sum for loss of profits, Mr. Clark, the valuation expert retained by the respondents, said that while the respondents operated as separate companies, the business could have been done by a single corporate entity and, more importantly, the quantum of damages would be the same whether calculated on the basis of a composite of the individual respondents or on a consolidated basis.

65 In tort, negligence must be established against each respondent. In this case, however, it was not a reviewable error for the trial judge to award damages to the respondents as a unit. I find that damages should be assessed on the basis of tort and it is unnecessary to base them on concurrent liability in contract.

NEGLIGENCE

66 Plastex, PPSL, and Jaycan are the respondents that did not contract directly with Dow for the purchase of resin. PPSL designed and installed the gas systems pipeline along with, after the reorganization, the new company Jaycan. Plastex was, after the corporate reorganization of December 1974, the owner and operator of all respondents (subject to some minority shareholdings in PPSL that did not enter into the lawsuit) until the receivership. So the respondents fall into two categories: Extruders and Profiles that were in a contractual relationship with Dow, and PPSL, Jaycan, and Plastex that were not. Dow alleges that the trial judge erred in finding a duty of care to any of the respondents.

67 The finding of a duty of care is a conclusion of both fact and law. As noted in Housen, supra at paras. 29-30, where a finding of mixed fact and law is a finding involving the intepretation of evidence as a whole, as in a finding of negligence, the standard will be that of palpable and overriding error. In this case, the finding of the trial judge regarding duty of care was dependent on certain facts. Where Dow challenges the facts upon which the trial judge based his finding that a duty was owed, the appropriate standard of review is that of palpable and overriding error. However, where it is alleged that a trial judge has not applied the correct legal test to the facts, the question of mixed fact and law is really a question of law and the appropriate standard is that of correctness.

DUTY OF CARE

a) Law

68 The oral reasons of the trial judge reviewing the basis for his finding a duty of care to all of the respondents are brief. He did not review the policy aspects of the two prongs of the test set out in Anns v. Merton London Borough Council, [1978] A.C. 728 (H.L.). That was an error of law. An analysis of the tests for duty of care and a review of their appropriate application must be done.

69 The test for a duty of care begins with an analysis of relationship and includes a consideration of foreseeability and policy. In Anns, the court set out two-steps to be followed in determining duty. Lord Wilberforce found that a court must first ask if there is a sufficiently close relationship between the parties so that, in the reasonable contemplation of party alleged to owe the duty, carelessness on its part might cause damage to the other party or parties? If the answer is yes, the court must then determine whether there are any considerations which ought to negative or limit the scope of the duty, the class of persons to whom it is owed or (c) the damages to which a breach of it may give rise. In Kamloops (City) v. Nielsen, [1984] 2 S.C.R. 2, the Supreme Court of Canada accepted the Anns test. In more recent cases, it has gone on to enrich this test by amplifying the scope of the relevance of policy concerns: Cooper v. Hobart, [2001] 3 S.C.R. 537, 2001 SCC 79, Edwards v. Law Society of Upper Canada, [2001] 3 S.C.R. 562, 2001 SCC 80.

70 In Cooper, the Supreme Court said that on the first step of the Anns test two questions arise: firstly, was the harm that occurred reasonably foreseeable as a consequence of the defendant's act and secondly, notwithstanding the proximity of the parties, should there be liability in tort. In other words, a court is to consider not only foreseeability and proximity but also policy concerns that arise because of the relationship of the parties. Following this first step of the analysis, if the decision is that a duty arises it should be considered a prima facie duty.

71 Next, the second- step of the Anns test is applied. At this stage, the court looks at residual policy concerns, extraneous to the relationship, that affect the prima facie duty. The Supreme Court said in Cooper that there are different kinds of policy considerations for each step.

72 To return to the first step of Anns, the Supreme Court in Cooper explained that reasonable foreseeability of harm must be supplemented by proximity, that is, there must be the type of relationship in which a duty of care may arise. This moves us back to Donoghue v. Stevenson, [1932] A.C. 562 (H.L.) and the famous question: who is my neighbour? Every student of law knows the answer given in that case: "... persons who are so closely and directly affected by my act that I ought reasonably to have them in contemplation as being so affected when I am directing my mind to the acts or omissions which are called into question": Donoghue, supra at 580, see also Hollis v. Dow Corning Corp., [1995] 4 S.C.R. 634 at para. 21. Proximity describes a relationship between parties such that a defendant is under an obligation to be mindful of the plaintiff's legitimate interests in conducting his or her affairs: Hercules Management Ltd. v. Ernst &Young, [1997] 2 S.C.R. 165. In Cooper, the following were listed as relevant factors in the evaluation of proximity: expectations, representations, reliance, and property or other interests. In the end the question is this: is it just and fair to impose a duty of care?

73 The Supreme Court has stated that categories of negligence are created when a duty of care has been found in particular circumstances. One such category is that of a duty to warn of the risk of danger: Rivtow Marine Ltd. v. Washington Iron Works, [1974] S.C.R. 1189. However, while that may deal with proximity, reasonable foreseeability must also be established: Cooper, supra at para. 36. The court then goes on to consider policy concerns with the relationships. It is only then that the

prima facie duty is established.

74 Moving on to the second step of Anns, the focus is on residual policy concerns. In Cooper, supra at para. 37 the court said that the analysis under this step is not required where the duty of care in issue falls within a recognized category. It is only in cases where a new duty is advanced. As the court said, "... before a duty of care is imposed in a new situation, not only are forseeability and relational proximity present, but there are no broader considerations that would make the imposition of a duty of care unwise": Cooper, supra at para. 39. The court went on to set out residual policy considerations including a consideration of whether the law provides another remedy and the critical question of whether the recognition of a duty of care would create the spectre of unlimited liability to an unlimited class.

2) Application of Law

75 The trial judge found that Dow had a duty to warn all of the respondents of the dangers associated with pipe made from the defective resin. However, Dow raises policy concerns that it says preclude the finding of a duty that Dow argues were not dealt with by the trial judge. The first is that the respondents chose to operate as separate companies with independent legal personalities so that their risk of liability to Dow would be limited. Dow argues that this apparent risk planning precludes the finding of separate duties to each of the respondents. Secondly, is that Dow claims that to find the existence of such duties would subject it to indeterminate liability.

76 Given that the duty in issue falls into the recognized category of duty to warn of a danger associated with a product, this may not be a case in which it is necessary to go through a detailed Anns analysis given the statements in Cooper that build upon those in Rivtow. However, the relationships of the various respondents with Dow, the number of parties, and the policy concerns left unexamined by the trial judge support the need for an analysis for duty of care.

(1) Anns: the first step

77 The very first step is to look at the relationships. Dow manufactured the polyethylene resin, in this case N5303. It knew the resin was defective before the first sale to Extruders. Extruders and Profiles manufactured pipe using the defective resin. It was known to all that parties that the pipe would be buried in the ground and that it would carry natural gas. PPSL, and later Jaycan, designed and constructed the pipeline. They did the warranty work on the pipeline. All companies were owned and controlled by Plastex. Dow provided information and advice about the qualities of the resin. There is no evidence of AOC providing information or of any of the respondents having any knowledge beyond what Dow provided. Indeed, when pipe began to crack, the respondents initially assumed that they were at fault. Dow knew of all of the respondents and how they worked together to provide a turn-key operation to the gas co-ops that were the penultimate consumers.

78 In this picture, was there a reasonable foreseeability of harm to each of the respondents given that the resin was defective and intrinsically harmful?

79 Applying the Donoghue test cited in Cooper: were the respondents, each of them considered separately, " persons' who are so closely and directly affected by [Dow's] acts" that it ought reasonably to have had them in contemplation as being so affected when it directs its mind to the acts or omissions that are called into question?

80 Using the resin with no knowledge that it was defective, Extruders and Profilers were manufacturing pipe that was dangerous when used as intended. PPSL and Jaycan buried that pipe in the ground and it transported a very dangerous and explosive compound, natural gas. As all the respondent companies experienced loss of business, loss of reputation, warranty costs, and charge-backs, the parent company, Plastex, suffered the cumulative effect of all the losses. Applying the factors from Cooper: expectations, representations, reliance, property and other interests, the answer to the final question must be: it is just and fair to impose a duty of care owed to each respondent in such circumstances.

81 My conclusion is that there was reasonable foreseeability of harm to each respondent and that there existed the requisite proximity with each respondent.

82 While it may not be necessary to go on to examine policy considerations within the relationships, Dow has argued that there are considerations favourable to it that were not dealt with by the trial judge.

83 Proceeding then to the second question of the first step of the Anns test, the question is: notwithstanding the finding of proximity under step one, are there policy reasons that support the conclusion that no duty should be owed to any of the respondents, and therefore Dow should have no liability to them in tort?

84 Dow's argument, based on statements in Bow Valley Husky (Bermuda) Ltd. v. St. John Shipbuilding Ltd., [1997] 3 S.C.R. 1210, is that because only Extruders and Profiles were in a contractual relationship with it, it follows that the respondents had chosen to reduce their risk exposure towards Dow and it is unfair and unjust to now find that it owed a duty of care to any of the respondents. Put simply, their argument is that because of the corporate organization of the respondents and the opportunity to allocate risk of liability and reduce the exposure of assets, Dow should owe no duty of care to any of the respondents.

85 It would come as a great surprise to the business community if this Court held that in the absence of any evidence of fraud or wrongdoing, corporate entities could not organize to lessen risk and protect resources without prejudicing each entity's right to claim against wrongdoers . In fact, the only risk allocation in the contracts was in favour of Dow as it attempted in the written contract to transfer the entire risk of defects in the resin (of which it had complete knowledge) to Profiles through clauses limiting liability. At the time of that contract the only other respondent that was active was PPSL.

86 Dow argues that it should not have a duty to the non-contracting respondents because, "...

imposing a duty of care to non-contracting affiliates in this case encroaches on the well-established principles of the separation of affiliated corporate entities." Dow is saying that the conclusion that there is a prima facie duty is negated where there is a contractual relationship with some of the involved parties but not all of them. The answer is that the analysis for duty must be done for the relationship between Dow and each of the individual respondents. If, in the result, each and all are owed duties, then the scope of Dow's potential liability is determined subject to the considerations of standard of care and scope of damages.

87 Dow is correct in stating that its tort liability must be assessed in the contractual matrix: Bow Valley, supra at para. 26. It goes further and says that the existence of contracts with two of the respondents should negate its prima facie duties in torts to all respondents. Dow was found earlier to be in fundamental breach of the contract with Profiles. Therefore, it cannot rely on the limitation of liability clauses at all. Dow has not pointed to anything in the contract that could have negated a duty to warn other than the ineffective limitation clauses. The conclusion to be drawn from the contractual relationships is that there is nothing there to negate or limit the finding of a prima facie duty to each of the respondents. This case is distinguishable from Bow Valley where the majority held that the duty to warn was negated by clauses in a valid contract that limited liability.

88 In determining how to analyze for a duty and to whom the duty is owed, the Winnipeg Condominium Corporation No. 36 v. Bird Construction Co., [1995] 1 S.C.R. 85, provides helpful guidance. A land developer had contracted with the defendant contractor to build an apartment building and he subcontracted for the masonry work. Because of dangerous structural defects in the masonry work, the subsequent purchaser, a condominium corporation, had to replace the cladding on the building. It sued the contractor.

89 Upon an application of the Anns test, the contractor was found to owe a prima facie duty of care to the subsequent purchasers. The Court rejected the contractor's argument that liability was to be determined solely under contract and liability in negligence was not available. The Court found a duty independent of the obligations owed under the contract, to construct a building without dangerous defects. It was characterized as being a duty that was "not parasitic upon any contractual duty between the contractor and the original owner."

90 D.F. Edgell in the text, Product Liability in Canada, (Toronto: Butterworths Canada, 2000) says there is no reason not to extend the logic of Winnipeg Condominium to products liability. I agree. There is a duty, independent of any contractual obligation, to take reasonable care not to manufacture and distribute a product that is dangerous. Breach of such a duty can be pursued in negligence by persons who are in contract with the manufacturer (subject to the viability of limitation of liability clauses) and also by persons who are not in contract: Bow Valley, supra at para. 19 per McLachlin C.J. dissenting, but not on this point.

91 In this case there are no policy considerations within the relationships that would negate or limit the prima facie duty of Dow to each of the respondents, including those in a contractual

relationship with Dow and those not.

92 Indeed, on the facts of this case, the policy considerations based on Dow's knowledge of the very dangerous nature of the pipe produced from the defective resin and the danger to the public strongly support the affirmation of duty. These will be dealt with in depth under the second step of the Anns test.

93 I find that there are no policy concerns that even challenge my conclusion that there is the necessary relationship, foreseeability, and proximity to found a duty of care owed by Dow to each of the companies.

(2) Anns: the second step

94 This step requires a look at residual policy concerns, that is, those outside of the relationship of the parties. As the Court said in Cooper, supra at para. 37, these are concerned with the effect of recognizing a duty of care on other legal obligations, in the legal system and in society more generally. It may not be necessary to do such an analysis in this case because the duty to warn falls into a recognized category. However, Dow argues that imposing liability in this case would raise the spectre of indeterminate liability. That enquiry is properly made in this part of the Anns test.

95 The claim of indeterminate liability can be broken down into parts: indeterminate class of plaintiff, over an indeterminate period of time, in an indeterminate amount. Winnipeg Condominium, supra at paras. 48-50.

96 This lawsuit is at the end of a long line of litigation brought on by the manufacture and sale of the defective resin. According to the US decision dealing with Dow's indemnity claims against its insurer, at the date it issued its decision, only this action had not been resolved. While Dow has acknowledged that it settled a number of relevant claims, it has not brought forward evidence that there are any more parties or any other litigation. There seems to be no basis, at this time, for concerns about other plaintiffs.

97 The resin has not been produced in nearly 30 years. Even at the time it was produced it was for a specific purpose, namely, to supply five Alberta pipe extruder companies. In addition, limitations periods for all plaintiffs have passed and Dow pursued its insurer for indemnity: see the US decision.

98 There remains little doubt that Dow's accountability for the defective resin has been concluded, except for the resolution of this case.

99 This last case in the chain represents a determined, finite claim. Dow disputes the quantum. The respondents have not cross-appealed. Dow's liability can be no more than that set by the trial judge. Thus, this is not a case where Dow faces the risk of indeterminate damage claims.

100 From a policy perspective, the facts in this case support the finding that Dow owed duties of care to each of the respondents. As discussed by La Forest J. in Canadian National Railway Co. v. Norsk Pacific Steamship Co., [1992] 1 S.C.R. 1021, in some cases there is the need to provide for additional deterrence against negligence. Dow sold a defective product that it knew presented a danger to consumers. It tried to shift the risk to others ignorant of it. There was an inequality in knowledge, bargaining power, and a vulnerability when the defect in the resin became a danger in the product representing 80% of the respondents' business.

101 The other legal obligations of the parties are a relevant consideration too. In this case, Dow is in breach of contract both directly and standing in the shoes of AOC. The breaches went to the core of what the parties had bargained for and deprived the respondents of any benefit of the product they had purchased. The breaches had profound implications for the other respondents. In this situation, the fact that two of the respondents could be awarded damages on the basis of breach of contract does not undermine or negate the finding of a duty of care in tort to those respondents in a contract relationship. Since the decision in Central Trust Co. v. Rafuse, [1986] 2 S.C.R. 147, the law is clear that a duty of care in torts can be imposed on parties in a contractual relationship. A plaintiff may base a claim in either contract or tort where liability in both exists. See also, BG Checo , supra and Bow Valley, supra.

102 I find that there are no residual policy considerations that negate or limit the finding that Dow owed a duty of care to each of the respondents. The policy considerations actually support finding such duties.

103 I find that the trial judge made no error in finding that Dow had a duty to warn all of the respondents of the dangers associated with the use of the defective resin: Rivtow, supra. I also find Dow had a duty to take reasonable care not to manufacture and distribute a dangerous product: Winnipeg Condominium, supra.

STANDARD OF CARE

104 The trial judge found that Dow breached the requisite standard of care as of August 1974 when its own internal documents showed inadequate antioxidant levels in the resin. Further, he found that Dow was "well aware" of the problems by the time the CSA set up a task force to review the situation in November of 1974. He noted that Dow did not challenge the conclusions of Dr. Williams, the expert witness for the respondents, who concluded that the resin was defective because of a low level of antioxidant and low density polyethylene. He agreed with Dow's submission that it was to be judged by the level of knowledge at the critical times, namely 1974 and 1975. He also noted that the trial judge in the US decision found that all of the resin, N5303, sold by Dow was "intrinsically harmful" such that pipe made from it was "deficient" for use in the "rural gasification" program.

105 Dow did not appeal the finding of the trial judge on standard of care but challenged it indirectly in submissions on the SOGA and the limitation of liability clause.

106 In its arguments on the application of the SOGA, it noted the fact that the resin was "a CSA approved black pipe compound for natural gas, water and brine" and that in late 1974 the resin met the CSA criteria. The fact that the resin was approved by the CSA was relevant in the determination of the appropriate standard of care. The trial judge dealt with that by finding that, given Dow's knowledge of the deficiency in the resin from internal reports, it could not rely on the "questionable actions of another".

107 In his conclusions, Dr. Williams states that a surprising fact of this case was that CSA did so little to test the Dow resin for certification. He said: "The CSA, as an organization, seems to have ignored their mission in relation to the approval and certification of the Dow resin almost entirely." The trial judge was entirely correct in discounting as a consideration in determining the standard of care, the fact that the resin had been certified by CSA.

108 Explanations put forward by Dow in its factum such as, a "general feeling" at a task force meeting in November 1974 that brittleness in the pipe was not caused by the resin, and that there was "no evidence to indicate that the Dow personnel did not believe that the new level of antioxidant would be appropriate" are challenges to fact finding. Dow called no evidence at the trial. The trial judge appropriately gave these submissions little weight.

109 Dow also states in its factum that it does not appeal the finding of the trial judge that it was a sophisticated company with knowledge of its formulation of the product and that it had difficulty meeting its own chemical requirements. Most importantly, it does not appeal the finding of the trial judge that Dow knew of the problems before entering into the contracts.

110 In conclusion, the trial judge did not err in setting the appropriate standard of care or in determining that Dow breached it.

CAUSATION

a) Law

111 In a negligence action, the defendant must be found to be the cause-in-fact and the cause-in-law of the injury to the plaintiff. The former is measured by the "but-for" test which is often difficult to apply. The latter involves legal tests and requires the determination of the limits of the plaintiff's liability: it is often dealt with under the heading of "remoteness" of damage and usually requires an analysis of policy considerations similar to that done under duty of care.

112 Was there reviewable error in the trial judge's findings of fact on the injuries and damages caused by the negligence? Did the trial judge ascertain the correct test for finding liability for pure economic loss? Did he correctly apply the correct test to the proven facts?

b) Application

(1) Cause-in-fact

113 What injuries did the defective resin cause? The trial judge found that pipes manufactured with N5303, the resin produced by Dow, were brittle and cracked and that this was caused by the "intrinsically defective" resin. The judge in the US decision had come to the same conclusion. Indeed, this causal connection was acknowledged by Dow in its brief in that litigation. According to the expert evidence, accepted by the trial judge, the level of antioxidant in the resin was enormously below industry standards and pipe made from it was, therefore, subject to "thermo-oxidant degradation". Given that no palpable and overriding error is alleged by Dow with respect to these findings of the trial judge, the respondents have proven that "but-for" the deficient resin, the pipes it fabricated and placed in the ground would not have cracked.

114 What damages resulted from the injuries caused by the defective resin? Firstly, the gas co-ops refused to pay the respondents and by mid-1976 the respondents were owed $1.2 million dollars. Secondly, refunds were demanded for all pipe held in inventory. Thirdly, the pipe was no longer saleable and there was no evidence that it had any salvage value. Lastly, there were unrecoverable repair costs, mounting operating expenses, and accelerated demands for payment from suppliers.

115 Damages under all heads are recoverable and will be dealt with specifically later in this judgment.

(2) Cause-in-law (remoteness)

116 There is a legal test to measure the extent to which a negligent defendant ought to be held liable for the damages suffered by a plaintiff . The principle is that injured parties should be restored to the position that they would have been in had the wrong not been committed. Often the question asked is: what damages were reasonably foreseeable, or, to put it another way, what damages are not too remote? The application of this test is difficult where the loss is economic.

117 The claim for lost profits for the year of the receivership, 1976, and the following five years is a claim for loss of profits and therefore is for economic loss. Since there was no physical damage recognized by law, it is a claim for "pure" economic loss. The trial judge found that the receivership of all of the respondents was foreseeable. However, the trial judge did not do the analysis required to determine whether relevant policy concerns should limit the extent of Dow's liability for the pure economic loss. That was an error of law because a policy analysis is now part of the legal test to determine foreseeability, or remoteness, of pure economic loss: Viridian Inc. v. Dresser Canada Inc. (2002), 312 A.R. 93, 2002 ABCA 173 at para. 28 and Cooper, supra at para. 31.

118 When the loss is economic loss, courts are concerned about maintaining control: in the words of Justice Cardozo, the fear is of "liability in an indeterminate amount for an indeterminate time to an indeterminate class": Ultramares Corp. v. Touche (1931), 255 N.Y. Supp. 170 (C.A.) at 179. The Supreme Court of Canada has been searching for a "principled mechanism" that would provide

assistance to the courts in deciding when an award for economic loss would be appropriate but it has proven to be elusive: Norsk, supra at 1137 per McLachlin J.(as she then was). Some of the earlier requirements were: to prove there was an "independent tort"; to fit the claim into a category, such as negligent misrepresentation; or, to found the claim on the physical loss of a third party, sometimes called a contractual relational loss. However, as stated by McLachlin J., in Norsk, supra, there is no single universal formula and the categories are not closed. What is required is a case-by-case analysis, where the appropriate legal tests for duty and causation and a thorough policy review are done.

119 In a new situation where the loss is pure economic loss, a policy analysis is especially critical. A policy analysis must be done to establish a duty of care (using the Anns tests), and also to determine the extent to which a defendant should have to compensate the plaintiff. This analysis easier to describe than to carry out. That there is overlap is not surprising. For example, it is necessary in both to determine foreseeability of harm. But there is also a basis for distinction with a difference.

120 In deciding whether there is a duty of care, the focus is on the relationship, proximity, and foreseeability of some harm and on relevant policy considerations. In determining scope of liability for damages for pure economic loss, the focus is on the nature of the negligent action and the foreseeability of the extent of the harm and relevant policy considerations.

121 In this case, a duty was found to warn and not to manufacture a dangerous product. The duty was breached because the appropriate standard of care was not met. The negligent actions caused harm, including pure economic loss. Dow says it should not be liable for any economic loss because the respondents suffered no physical harm and, further, it is not a case of "contractual relational economic loss" that is, economic loss suffered as a result of damage to the property of a third party. It relies on Bow Valley Husky, supra.

122 The lay person or the scientist might find it hard to believe that in this case the respondents' property has suffered no harm. After all, the defective resin was a critical component in the pipe and made the pipe defective also. However, finding property damage in this manner, described as "complex structure theory", was rejected by La Forest J. in Winnipeg Condominium, supra. He expressed concern that the theory would "circumvent and obscure underlying policy questions" and emphasized that "it is preferable for courts to weigh the policy issues openly": Winnipeg Condominium, supra at para. 15. Thus, Dow is correct, as far as the law is concerned (at least at this time) the respondents have suffered no physical damage.

123 This is not a case of "contract relational economic loss" and can be distinguished from the Bow Valley case on its facts. In Bow Valley, the plaintiffs sued to recover money that they were required by contract to pay for the rental of an oil rig that was not useable because of the defendant's negligence. The plaintiffs suffered pure economic loss because of the damage to the rig that was owned by a third party. The parties similarly located in this case would be the gas co-ops who are

not a party to this action.

124 This is a case where the claims are for pure economic loss and cost of repairs resulting from failure to warn (at any time) and is a products liability case based on the manufacture of a product known by the manufacturer to be dangerous. Both the Rivtow and Winnipeg Condominium cases are applicable. Like Rivtow, it is a case where repairs had to be done and there were economic consequences beyond just the cost of repairs. Like Winnipeg, it is a case where a defect posed a real and substantial danger to the public and compensation for timely repair and pure economic loss was held to be recoverable and supported by policy considerations. The respondents here did have a property interest in the pipe as the plaintiffs in those cases had in the crane and building. However, the nature of the pure economic loss here differs from both as it involved not only the loss but also the total termination of profits of the respondents.

125 In all of its recent decisions on pure economic loss, the Supreme Court of Canada has undertaken a policy analysis in order to determine whether a defendant ought to be held liable and to what extent, and has made it clear that lower courts must do the same. I must do the policy analysis not done by the trial judge using both a narrow and a broad focus. There is an overlap with the policy analysis done for duty of care, especially with that done for the second step of the Anns test.

126 Looking at Dow's situation through the lens of policy, are there reasons that Dow should not be required to pay for any part or all of the economic loss of the respondents? Are there reasons that it ought to? What is the effect on law and on society of a decision one way or the other?

127 This takes us back to some of the basic facts. Dow, a major petro-chemical company, sold resin that it knew was defective and dangerous when used as it knew it would be. It never warned any of the respondents about the risk. The respondents were small companies with no relevant expertise who relied for that on Dow. While Dow did acknowledge the critical facts in litigation in which it claimed indemnity from its insurer, it required the respondents to prove them in the trial of this action. The respondents did not stop manufacturing pipe and installing it, when it became apparent that the pipe was cracking because the respondents did not know the cause. They carried on trying to satisfy customers and doing repairs under the warranties.

128 They did question Dow about the quality of the resin in August 1975 and sent back some resin that they had received. Dow responded in writing, saying that they had tested some of the pipe and found it "indicated very uniform blending and consistent black levels. [...] Well done!" It is possible to interpret this as an intentional evasion of the question. In any case, Dow never did admit to the respondents that they had a problem with the resin. Later, the respondents asked for financial assistance but were refused. They carried on business until their financial position became untenable and they were forced into receivership by the Canadian Imperial Bank of Commerce. The respondents went from flourishing to moribund in two years. The expert evidence was that they missed out on an opportunity to participate in the booming oil and gas industry in Alberta.

129 The contractual matrix does not assist Dow in limiting liability because it was found to have fundamentally breached its contractual obligations and its attempt to limit its liability unconscionable.

130 From a narrow, or case-specific perspective, are there policy reasons why Dow should not be liable for the cost of repairs and loss of profits suffered by the respondents? I find there are none.

131 What are the relevant policy considerations from the broader perspective? Given that the tort was the negligent manufacture of a product as well as that its intended use was dangerous followed by a failure to warn of the known dangers, policy considerations support the tortfeasor paying the entire loss suffered by the injured parties. I agree with the statement by D.F. Edgell in Product Liability, supra at 245, that there is a strong public interest in deterring manufacturers from marketing dangerous products. This case is not atypical in that there was a significant difference in knowledge and expertise between the parties. Indeed, here there was an intentional withholding of information. There are policy reasons to support liability so that consumers can reasonably expect that they can rely on manufacturers not to supply products that they know to be dangerous and to warn them if risks are discovered.

132 As for compensation for the cost of repairs, it is now clear that the ruling in Rivtow precluding such an award is no longer good law. As La Forest J. said later in Norsk, supra at para. 37, it is important to encourage the prevention of harm and reduction of risk goals achieved by timely repairs: see also Product Liability, supra at 238. LaForest J .went on to say in Winnipeg Condominium, supra that barring recovery for the cost of repair of dangerous defects had a chilling effect on incentive and action to effect repairs .

133 In summary, policy considerations support liability in this, a products liability case where the defect presented a known danger to the public and the consumer was reasonable in relying on the manufacturer's expertise. I find that the trial judge committed no error in deciding that Dow should be liable for economic loss, that is the loss of profits, of the respondents and also for the cost of repairs. The extent of that liability will be reviewed in the next section.

DAMAGES

134 The compensation claimed by the respondents for the damage caused by the defective resin was for:

(i) recovery of the purchase price of the resin paid by Extruders and Profiles between July 1974 and June 1975;
(ii) the cost of repairs to the pipelines done by PPSL and Jaycan; and
(iii) the loss of profit of all companies, including the parent company, Plastex from 1976 through 1981. (The term "loss of profit" in this case refers to the loss of net income before taxes.)

135 The trial judge awarded damages under all three heads. He found the cost of the Dow resin purchased to be $576,958. As to the cost of repairs (and the associated additional testing required and out-of-pocket expenses), the trial judge accepted the estimates of Mr. Kenway, the comptroller and vice-president of finance for the respondents but, taking a cautious approach and taking into account repairs unrelated to resin problems, he discounted them by 25%, awarding $291,000. Again using what he described as a cautious approach, he reduced by 50% the award suggested by the expert witness, Mr. Clark, for loss of profit and set that amount at $1, 916,500.

136 An award of damages by a trial judge is not to be interfered with on appeal unless the trial judge applied the wrong principle of law or the overall amount is a wholly erroneous estimate: Herron,supra.

137 Dow does not challenge the quantum of the awards for the cost of resin or the repairs and, at the hearing, accepted that an award for loss of profits might be appropriate up to the date of the receivership in September of 1976. However, it says that awarding the cost of resin and of repairs would be a double recovery and that the award for loss of profits after the bankruptcy is too remote. Further, it says that if lost profits are awarded, then there should be no award for the cost of the resin.

138 The issues raised by Dow require that all of the damages suffered by the respondents be reviewed more specifically. Firstly, as the defective pipe made from the defective resin was under warranty, it had to be repaired. All parties (it seems with the exception of Dow) were concerned about safety. Because Dow refused to divulge the nature of the defect, the respondents spent money attempting to repair the unrepairable. The monies spent on repairs, including the associated costs of testing and "out-of-pocket expenses" were caused-in fact by Dow's failure to divulge the nature of the defect and to warn of the danger.

139 Secondly, as eventually all the defective pipe had to be replaced, the money spent to purchase the resin was a wasted expenditure. Had the pipe been repairable, that would not have been so and Dow's argument that awarding damages for the cost of resin and the cost of repairs would be a double recovery might have some merit. Thus, the money spent by the respondents for the purchase of the defective resin and in the attempt to repair the defective, unrepairable pipe, was wasted. But for Dow's negligence, the respondents would not have suffered loss under both heads of damage. The losses are complementary and not duplicitous.

140 The respondents claimed loss of profits after they were put into receivership in September 1976 because they lost the opportunity to continue in a profitable business. This is the claim most strenuously challenged by Dow. As to the calculation for all years, it says that the trial judge here made the same error as the trial judge in Houweling Nurseries Ltd. v. Fisons Western Corporation (1988), 37 B.C.L.R. (2d) 2 (C.A.) because he failed to review the evidence and consider the validity of the factual assumptions upon which the mathematical calculations were based. As to the years 1977 to 1981, it says that the loss is too remote.

141 Cory J., then a member of the Ontario Court of Appeal said that to deny loss of future or prospective business profits "flies in the face of reason and common sense" because commercial contracts for sale and delivery of goods must be entered into with the goal of making a profit in the future: Canlin, supra at 690. Cory J. recognized that the assessment of damages may be difficult and must of necessity be an estimate, but emphasized that a court nevertheless has the responsibility to do an assessment based on the available evidence. He said that evidence should include the past history and future business prospects of the company and should include a consideration of the loss of goodwill and reputation because of the breach: Canlin, supra at 695.

142 Mr .Clark, a chartered accountant, was tendered as an expert in the field of business evaluations and the determination of business losses; he testified and supplied a report. In his report he detailed the documents and information, including the factors suggested by Cory J., that he had reviewed prior to coming to his conclusions. Dow did not challenge Clark's expertise and called no witnesses.

143 The time frame for the calculation of loss of profits was 1976 to 1981. Clark's opinion was that the respondents (he refers to them together as Plas-Tex), with their established operational infrastructure, skilled employees, management, equipment, and potential, would have captured business in the oil and gas industry in the years 1976 to 1981. It was Clark's opinion that, but for the receivership triggered by the consequences of the defective pipe, Plas-Tex would have continued as a going concern beyond 1981. Referring to the booming oil and gas industry in Alberta during the 1976-1981 period, he said, "[i]n the aftermath of the defective resin problems and the ensuing receivership, Plas-Tex missed out on an opportunity to participate in this growth." He stated that his forecast of lost profits for 1976 reflected the fact that the respondents had over $8.5 million in unbilled work-in-progress and contracts-in-hand in September 1975. It is noteworthy that Clark estimated lost profits for the one year 1976 at $1,086,000 and the total award by the trial judge was $1,916,500 to cover the entire period of the claim, namely the years 1976 to 1981.

144 Dow's attempt to characterize the receivership as the fault of the respondents was rejected by the trial judge. He found that, after an initial meeting with the Canadian Imperial Bank of Commerce, the bank moved quickly and appointed a receiver. The receiver then decided to liquidate the business without any attempt to preserve it. The trial judge accepted the evidence of the respondents' financial officer that any reprieve from this course of action would not have been sufficient to save the respondents.

145 The conclusion of the trial judge that the defective resin caused the respondents to lose profits is supported by the evidence. The calculation of the quantum presented a difficult but not insurmountable task: Canlin, supra at 691. The expert evidence of Clark on the fiscal past and future of the respondents and the time frame with regard to loss of profits was accepted by the trial judge. However, in his reasons, the trial judge recognized that a trial judge "is not shackled to the evidence of these professionals alone": Nathu v. Imbrook Properties Ltd. (1992), 2 Alta .L.R. (3d) 48 (C.A.) at 54, and did a thorough, critical analysis of the evidence before arriving at his decision, both as to

entitlement to an award for loss of profits and as to the quantum. He stated that he was taking a cautious approach and applying a substantial discount factor to the quantum suggested by the expert, which was $3,833,000. He awarded 50% of that amount, $1,916,500. There is absolutely no merit in Dow's position that the trial judge in dealing with cause-in-fact, simply accepted the expert report or came to a global figure without examining the evidence.

146 Further, there is no merit in Dow's argument that an award for loss of profits and for the cost of the resin and repairs would be double recovery. As stated earlier, the amounts spent for the resin and on repairs were separate losses. The loss of profit as calculated by Clark was loss of net income after the deduction of expenses and was based on a profiling of the respondents over a number of years. There is no merit in Dow's argument that to allow damages on all of the three heads claimed would be double recovery.

147 In any case, there is authority for the award of loss of profits and well as loss for the cost of materials. The trial judge referred to Gill v. Kittler (1983), 44 A.R. 321 (Q.B.), which relied on a decision of this court, affirmed by the Supreme Court of Canada, Sunnyside Greenhouses Ltd. v. Golden West Seeds Ltd. (1972), 27 D.L.R. (3d) 434 (Alta.S.C.A.D.), (affirmed, [1973] 3 W.W.R. 288 (S.C.C.)) In the Sunnyside case damages were given for the purchase price of roof panels for a greenhouse, the wasted cost of installation, and the loss of profits when the panels did not permit light sufficient for the growth of plants. Although these cases were decided in contract, as discussed below, the measure of damages in tort should be the same.

148 In summary, the trial judge found that the defective resin caused injuries to the respondents and he set the quantum of the damages under each head of damages. He did not assign the damages to any particular respondent but instead to them as a unit. I find that he made no error in the assessment and award of damages.

CONCLUSION

149 The decision of the trial judge on damages is affirmed on the basis of the liability of Dow to the respondents in negligence. The appeal is dismissed.

PICARD J.A.

CONRAD J.A.: I concur.

O'LEARY J.A.: I concur.