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Legal Considerations of Reproductive Hazards in Industry in the United States

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Clearly, the human risks posed by reproductive hazards in the work place are both serious and far-reaching. An effective control strategy, then, must be one that emphasises prevention while preserving employment opportunities for the worker. It is hoped that employers will recognise the need for voluntary abatement of reproductive hazards. It must be recognised, however, that employees may need to avail themselves of legal mechanisms to encourage preventive actions. In many cases the most readily available mechanisms for preventive relief will be those created by federal statute; in other instances, private actions may be required. Legislative and statutory mechanisms include standard-setting for reproductive hazards; access to exposure and medical records; the rights of workers to individually refuse hazardous work; and antidiscrimination protection. Private actions include the court injunction; collective bargaining by unions; and suits for damages suffered.

LEGISLATIVE AVENUES FOR PROTECTIVE RELIEF

There are two comprehensive federal statutes that address the problem of regulating hazards in the work place. The Occupational Safety and Health Act (OSHAct)¹ focuses on the prevention of exposure to work place hazards in general, and is designed to provide relief for the worker only, and not for his or her offspring. On the other hand, the Toxic Substances Control Act (TSCA)² provides a means for the regulation of the general production and use of chemical substances. Its mechanisms can be utilised on behalf of both parents and offspring.

Section 6(b)(5) of OSHAct gives the Secretary of Labor the responsibility for setting health and safety standards for the work place. The statutory delineation of this responsibility³ clearly indicates that it was to be utilised to develop

standards which reduce reproductive hazards: 'The Secretary, in promulgating standards dealing with toxic materials or harmful physical agents under this subsection, shall set the standard which most adequately assures, to the extent feasible, on the basis of the best available evidence, that no employee will suffer material impairment of health or functional capacity even if such employee has regular exposure to the hazard dealt with by such standard for the period of his working life.' To the extent that they pose a danger to the health or functional capacity of the exposed worker, or perhaps to that worker's future off-spring, reproductive hazards are a proper subject for standard setting under Section 6(b).

Physical injuries are certainly within the scope of this provision. The impairment of reproductive or sexual capacity by mutagens or other toxic substances, for example, clearly constitutes a 'material impairment of . . . functional capacity'. Similarly, damage to the pregnant mother as a result of exposure of the fetus to a teratogen is a material impairment of the mother's health. Further, Section 6(b) would appear to envisage the regulation of reproductive hazards for their effect on the mental or emotional health of the worker-parent, although the Occupational Safety and Health Administration's (OSHA's) regulations have not yet been extended to the prevention of other than physical damage. For while OSHAct was not designed to produce a trauma-free work place, it was intended to reduce the health risks posed by physically harmful hazards. The mental health dangers posed by a worker's physical exposure to teratogens or germ cell mutagens are no less a material impairment of health than a number of physical impairments for which regulations at present exist⁴, and should be given consideration in devising appropriate control mechanisms for reproductive hazards. Finally, the United States Court of Appeals for the District of Columbia has indicated that the health of future worker offspring must be considered in the setting of OSHAct standards⁵.

The Secretary's authority to regulate such hazards is quite broad. So long as he or she remains true to the goal of securing a safe and healthful work place environment, the Secretary may embrace a variety of regulatory alternatives in setting work place standards. A mechanism which may prove useful in the regulation of reproductive hazards is medical removal protection (MRP). In essence. MRP involves the removal from one work area of employees who are particularly susceptible to a hazardous exposure within that area and the reassignment of those employees, at comparable salary and seniority levels, to another work area within the plant where the hazard is not present. It may also involve a layoff with pays. The District of Columbia Court of Appeals has approved an MRP programme for lead exposure as a valid exercise of the Secretary's authority under Section 6(b), and this mechanism may well be appropriate for the protection of workers, who may prove to be particularly susceptible to damage from reproductive hazards. MRP programmes would appear to be sensible only where their cost is exceeded by the cost of actually removing the reproductive hazard from the work place. When properly utilised, however, MRP programmes appear capable both of encouraging beneficial job redesign and of facilitating worker co-operation with programmes of periodic biological monitoring.

Recognising the fact that the Section 6(b) standard-setting procedure would be incapable of addressing all possible hazards in a timely fashion, Congress imposed an affirmative duty on employers to remove serious hazards from the work place even where such hazards are not the subject of a specific OSHAct standard. Section 5(a)(1)⁸ mandates that each employer 'furnish to his employees employment and a place of employment which are free from recognised hazards that are causing or are likely to cause death or serious physical harm to his employees. Reproductive hazards were intended to be included within this duty. Clearly, a work place hazard which impairs the sexual or reproductive process, or which endangers the health of the mother through damage to the fetus, is an affront to the physical integrity of the affected worker.

While the general duty clause requires the employer to provide a work place free of recognised hazards likely to cause serious physical harm to his workers, the courts have not yet addressed the question of whether OSHAct permits the employer to achieve compliance with Section 5(a)(1) by excluding from the work place those employees for whom a particular condition poses a hazard. This is a particularly critical question in the context of reproductive hazard control. A number of employers have implemented policies which exclude fertile females—and, in some cases, non-sterilised males—from jobs which involve exposure to certain reproductive hazards. While usually done in the name of worker protection, the benefit of such policies inures largely to the employer, who avoids the cost of removing the reproductive hazard from the work place while, at the same time, ensuring against future liability from damages to the offspring of the exposed workers. To the extent that they discriminate against employees of one sex, policies of this nature may well violate Title VII of the Federal Civil Rights Act. In addition, they may also violate OSHAct.

Thus far, reproductive hazards have been given little attention under OSHAct. Work place exposure to DBCP has been regulated primarily because of its danger as a reproductive hazard¹⁰. Further, while compliance with the permissible exposure level for lead will not ensure against reproductive damage¹¹, the lead standard does include an MRP provision intended to protect both male and female workers from reproductive effects¹². Most reproductive toxins, however, have thus far escaped regulation under either Section 6(b) or the general duty clause.

The general duty clause has also been under-utilised with regard to reproductive hazards. One difficulty in regulating reproductive hazards under OSHAct is the frequent lack of conclusive evidence that a particular substance causes a particular reproductive injury. The precise human effects of many known or suspected mutagens and teratogens may be especially difficult to discern. A degree of uncertainty is almost always a part of the regulatory process, however, and was certainly present in the development of standards for the carcino-

gens and other toxins which are currently regulated under OSHAct. Persuasive animal carcinogenicity, even in the absence of confirmatory epidemiological evidence, has been deemed sufficient to regulate a substance as a potential human carcinogen¹³. Indeed, under the Occupational Safety and Health Administration's (OSHA's) generic cancer policy, suspect carcinogens are subject to regulation.

OSHAct does not require certainty. Under Section 6(b), the Secretary must show that it is more likely than not that a hazard poses a risk of material impairment before it may be subjected to regulation. Interpreting this section in the light of Section 3(8) of the Act¹⁴, the Supreme Court has added the requirement that the probable risk be significant with regard to frequency of occurrence¹⁵. Section 5(a)(1) also pertains to probable risks. It does not require a determination that a substance will cause serious physical harm, but only that it is likely to cause such harm. While these evidentiary burdens cannot be taken lightly, they are far from insurmoutable.

Regulation of reproductive hazards in the work place may also be pursued through the Toxic Substances Control Act. TSCA contemplates a two-tiered approach to the control of chemical toxins. It provides a mechanism for the systematic testing of potential toxins to determine whether they present a risk of injury to human health or the environment, and further provides a means to control the production or use of those substances which present an unreasonable risk of such injury. Congress clearly intended that TSCA be used to regulate reproductive hazards. Section $4(b)(2)(A)^{16}$ is specific in its enumeration of this coverage: 'The health and environmental effects for which standards for the development of test data may be prescribed include ... mutagenesis, teratogenesis, behavioral disorders ... and any other effect which may present an unreasonable risk of injury to health or the environment.'

TSCA requires the testing of a potentially dangerous chemical substance to be undertaken by the manufacturer of that substance. In the case of an existing chemical being put to an existing use, Section 4(a) requires testing where that chemical 'may present an unreasonable risk of injury to health or the environment', or where the chemical is produced in substantial quantities and either 'may reasonably be anticipated to enter the environment in substantial quantities' or 'there... may be significant or substantial human exposure'. Section 5 imposes similar requirements for new chemicals, and for existing chemicals put to a significant new use. Here, however, additional safeguards exist, such as production or new use may not begin until 90 days after all required testing is completed.

The purpose of the testing requirement is to provide the necessary data for a determination of whether regulation of a production or use is appropriate. Responsibility for the development of this regulation, and for the enforcement of the Act, rests principally with the Administrator of the Environmental Protection Agency (EPA). The Administrator may impose a temporary production or use standard, pending required testing, under Sections 5(e) and (f)¹⁹, may file action in Federal District Court to enjoin the production or use of an

imminent hazard under Section 7^{20} , and may impose permanent standards on the production or use under Section 6^{21} . For toxic substances generally, the Administrator is required to develop a permanent standard, or take other decisive action, upon a finding that there is 'a reasonable basis to conclude' that a substance poses an 'unreasonable risk to health or the environment'²². In the case of carcinogens, mutagens or teratogens, the Administrator is given a more specific statutory directive.

Section 4(f) provides that whenever there is information 'which indicates to the administrator that there may be a reasonable basis to conclude that a chemical substance or mixture presents or will present a significant risk of serious or widespread harm to human beings from cancer, gene mutations, or birth defects, the administrator shall . . . initiate appropriate action under Section 5, 6, or 7, to prevent or reduce to a sufficient extent such risk or publish in the Federal Register a finding that such risk is not unreasonable'²³. Section 9 of TSCA requires the Environmental Protection Agency (EPA) to report findings under Section 4(f) to OSHA for appropriate action, but does not preclude EPA's exercise of authority over the suspect chemical itself²⁴.

This section provides an excellent mechanism for the control of many serious reproductive hazards. To date, however, EPA has not invoked the provisions of Section 4(f) for any suspected teratogen or mutagen. This appears to be a failure to fulfil a direct statutory mandate. While the language of Section 4(f) arguably allows the Administrator a degree of discretion in determining whether a substance poses a significant risk, it also clearly anticipates that the Administrator will take regulatory action in the face of scientific uncertainty. Section 4(f) requires some action whenever there may be a reasonable basis to conclude that a significant risk exists. Certainly, a number of teratogens and mutagens are eligible for regulation on this basis.

Access to information regarding the identity of chemicals to which a worker may be exposed, actual exposure data and medical records is essential to ensure that the worker utilise the avenues open to him or her for protecting reproductive health. Under OSHAct, two regulations have been issued: the Hazard Communication Standard^{24a} providing limited information on chemical identity and Access to Employee Exposure and Medical Records^{24b}. The latest regulation provides that the workers be given access to recorded information of adverse health effects, but it does not by itself require the recording of such information. It is under Section 8(e) of TSCA that EPA (not the worker) must be informed of a substantial risk of injury to health.

In addition to general regulatory controls, federal statutes also provide workers with avenues for individual relief. In the context of reproductive hazard control, the two most valuable statutory self-help mechanisms are the right to refuse hazardous work and the right to be free of sexual discrimination in the work place.

Under both the National Labor Relations Act (NLRA) and OSHAct, employees have a limited right to leave the work place rather than submit to

hazardous working conditions²⁵. When properly exercised, this right protects an employee from retaliatory discharge or other discriminatory action for refusing hazardous work. The nature of this right under NLRA depends on the nature of any relevant collective bargaining agreement. Non-union employees, and union employees whose collective bargaining agreements specifically exclude health and safety from a no-strike clause, have the right to stage a safety walkout under Section 7 of the Act²⁶. If they choose to stage such a walkout on a good faith belief that working conditions are unsafe, they will be protected from retaliatory action by their employer²⁷. Union employees who are subject to a comprehensive collective bargaining agreement may avail themselves of the provisions of Section 502²⁸. Under this section, an employee who is faced with abnormally dangerous conditions has an individual right to leave the job site. Such right may be exercised, however, only where the abnormally dangerous nature of the working conditions can be objectively verified²⁹.

Under a 1973 OSHA regulation, the right to refuse hazardous work under OSHAct extends to all employees of private employers, regardless of the existence or nature of a collective bargaining agreement. The scope of this right, however, is not yet clear. Section 11(c) of OSHAct protects an employee from discharge or other retaliatory action arising out of his or her exercise of any right afforded by the Act30. The Secretary of Labor has promulgated regulations under this section which define the right to refuse hazardous work in certain circumstances; where an employee reasonably believes that there is a 'real danger of death or serious injury', where there is insufficient time to eliminate that danger through normal administrative channels and where the employer has failed to comply with an employee request to correct the situation³¹. This regulation has survived challenge in the Supreme Court. The unanimous Court held that the Secretary's action was authorised by Section 11(c), and noted that the regulation 'simply permits private employees of private employers to avoid workplace dangers that they believe pose grave dangers to their own safety'32.

Although it has not been widely used for this purpose, the right to refuse hazardous work does appear to provide a limited means of relief for employees facing reproductive hazards in the work place³³. An employee who contemplates the exercise of one of these three statutory rights, of course, should take care to ensure that his or her work place situation meets the criteria for such exercise. Clearly, the Section 7 right is the broadest of the three, as it permits a subjective determination of work place danger. As noted, however, it applies only to certain categories of employees, and contemplates a concerted action. This usually means that more than one employee must be involved, although an individual work stoppage could qualify if it is intended to serve the interests of other workers. Exercise of the Section 502 right requires an objectively verifiable hazard, and thus does not protect against retaliatory action should the employee's subjective determination prove to have been incorrect. Under Section 11(c) of OSHAct, as noted by the Supreme Court, '... any employee who acts

in reliance on the regulation runs the risk of discharge or reprimand in the event a court subsequently finds that he acted unreasonably or in bad faith'34. Here the standard is one of reasonableness, not correctness, of hazard perception. Proof of the violation of an applicable OSHAct standard or general-duty clause citation should provide at least a partial basis for proof of the existence of a hazard, or of the reasonableness of the perception of a hazard³⁵. The employee exercising either the NLRA Section 502 or OSHAct right must determine that the danger was sufficiently 'hazardous' to warrant such exercise. Proof of an 'abnormaily dangerous' condition under Section 502 may be particularly difficult in inherently dangerous jobs, as this section is usually applied only to conditions that are not a normal part of the job36. For this reason, reproductive hazards will probably be addressed more easily under the OSHAct right. Certainly, any reproductive hazard presents concrete risk of a serious injury. The key question will be whether that risk is of such an immediate nature as to present a real danger of injury before administrative procedures can be utilised. Hazards such as germ cell mutagens, which can cause serious and irreversible harm after only a short-term exposure, would appear to meet this criterion.

A final limitation on the right to refuse hazardous work is its uncertain applicability to injuries to a worker's future offspring. The OSHAct right appears to be applicable only to hazards which affect the health and safety of workers, and the exercise of this right would appear to be based on potential damage to the worker³⁷. The applicable language of the NLRA is not limited to worker health and safety, however, but rather contains broad protections against discriminatory action and coercion, and is quite clearly designed to provide remedies for mental distress³⁸. Thus, a work place teratogen may very well constitute a dangerous condition under Sections 7 and 502.

Another self-help mechanism is found in Title VII of the Civil Rights Act, which provides that '... women affected by pregnancy, childbirth, or related medical conditions shall be treated the same for all employment-related purposes... as other persons not so affected, but similar in their ability or inability to work...'³⁹.

This provision, designed to protect women from sexual discrimination in the work place, calls into question the permissibility of the fetus protection policies. An employer who excludes fertile women from a work place because they may become pregnant is discriminating against those women on the basis of their potential to become 'affected by pregnancy, childbirth, or related medical conditions'. A number of commentators have argued that such discrimination is violative of Title VII⁴⁰. This interpretation, if followed by the courts, should provide female workers with a valuable tool for addressing work place hazards⁴¹.

An employee who feels that her right to be free of sexual discrimination has been violated may petition for relief under the Civil Rights Act. If she is successful, she will ordinarily be entitled to recovery of attorneys' fees and costs, as well as appropriate redress for the discrimination⁴². There are two principal defences to a Title VII action. One is the bona fide occupational qualification

(BFOQ) defence, which requires the employer to demonstrate that the policy of discrimination was reasonably necessary both to the essence of its business and to the promotion of worker safety or efficiency⁴³. In the case of a 'fetus protection' policy, this would require a strong showing that women of child-bearing capacity are unable to efficiently and safely perform their job. The second defence is based on business necessity, and requires the employer to demonstrate that the discriminatory policy is absolutely essential to the continuation of the business, and, upon a showing by the plaintiff that alternatives are available, that the continuation of the business cannot be protected through any reasonable alternative to the policy44. Both defences have been rather narrowly construed by the courts⁴⁵, and some commentators have concluded that the successful assertion of either defence will be difficult for employers seeking to justify a fetus protection policy⁴⁶. In the past, the business necessity defence has been available only where the policy in question was not discriminatory on its face⁴⁷ Thus, as discrimination 'on the basis of pregnancy, childbirth or related medical conditions' has been specifically designated as sex discrimination under Title VII, this defence would not appear to be available where the 'fetus protection' policy applies only to fertile women. Nonetheless, the Fourth Circuit has characterised one such policy as 'literally expressed in gender-neutral terms', and has held that business necessity, if properly established, is an appropriate defence⁴⁸. This position conflicts with that taken by some commentators⁴⁹, as well as with the articulated position of at least one federal district court⁵⁰, and appears inconsistent with the plain language of the Civil Rights Act⁵¹.

One commentator has argued that Title VII will permit fetal protection policies only if they are applied equally to fertile employees of both sexes⁵². Indeed, as discussed previously, there is substantial scientific evidence to oppose a policy that isolates fertile women from reproductive hazards without also isolating fertile men. A recent report of the Council on Environmental Quality summarises the available information as follows: 'The scientific basis for differential regulation is limited. Reproduction involves a wider range of processes in females than in males, and some processes in females involve critical periods of differential and development. However, it does not necessarily follow that women are more sensitive to the action of any given agent. Where extensive data have been compiled on both sexes (e.g., for anaesthetic gases and smelter emissions), evidence has been found for adverse effects resulting from exposure of both men and women, including some evidence for adverse fetal effects following exposure of males (citations omitted).'53

An employer's recognition of the fact that it may face liability as a result of fetal damage caused by the exposure of male employees to a reproductive hazard may well tip the balance in favour of a more healthful work environment. As noted by Wendy W. Williams of Georgetown University: 'The option of excluding workers at risk may well seem less attractive in light of such evidence than it did when the employer assumed that only women workers transmitted fetal hazards. A workplace composed exclusively of sterile men and women and

post-menopausal women will be unappealing to most employers. Under these circumstances, the employer may be inspired to develop solutions short of exclusion, thus not only protecting itself from liability and advancing the health of offspring but promoting the employment interests of workers as well." 54

OTHER MECHANISMS FOR PROTECTIVE RELIEF

In addition to specific statutory remedies, there are more general avenues of relief which may be used to seek protection from reproductive hazards. The two most important of these are the common law injunction and the collective bargaining agreement.

The equitable right to an injunction has long been recognised as common law⁵⁵. Through injunctive relief one can, under appropriate circumstances, obtain a court order prohibiting another from taking or continuing a particular action. Although the availability of injunctive relief varies with the particular facts of each case, the right to an injunction is generally dependent on the demonstration of three factors: the existence of a continuing or recurrent risk of irreparable harm, the existence of a legal duty to refrain from causing such harm, and the inadequacy of other available remedies in preventing that harm. As a number of reproductive hazards in the work place appear to meet these criteria, injunctive relief may be an excellent mechanism for addressing those hazards. Injunctive relief may prove especially valuable in dealing with hazards that primarily affect the offspring, rather than the parents, as most states provide rights of action for such hazards at common law.

Another useful preventive mechanism may be the collective bargaining process. Clearly, health and safety considerations are a proper subject of collective bargaining. In a recent Landmark set of three cases decided by the National Labor Relations Board, the withholding of information regarding chemical identity and health effects may be a violation of the employers' duty to bargain in good faith⁵⁶. If workers become sufficiently cognisant of the potential effects of work place hazards on their ability to bear children, they may well seek to include abatement or reduction of reproductive hazards as a condition of employment under their collective bargaining agreement. The inclusion of this topic in labour/management negotiations, especially when coupled with the use of other mechanisms for protective or compensatory relief from reproductive hazards, might do much to improve work place safety. Any attempt to place provision of this nature into a collective bargaining agreement, however, should take care not to waive the right to utilise any of these other avenues of relief.

CONCLUSIONS

The remedies outlined above, if properly utilised, can do much to reduce occupational exposure to reproductive hazards. But the effort cannot be a piecemeal one. As these various actions will provide incentives for change at different levels of the industrial process, it is their integrated use which will bring about the most meaningful and pervasive reduction of potential damage to reproductive health.

Industrial control of reproductive hazards — whether through the reduction of exposure to hazards from existing processes or through a shift to different, less hazardous technology — will come in two principal ways. Either industry will change on its own, in response to economic constraints, or it will change in compliance with government regulation. Both OSHAct and TSCA provide attractive avenues for regulatory relief, as both articulate a comprehensive federal policy for the control of occupational toxins. Nonetheless, the limitations of the regulatory process, and the apparent unwillingness of OSHA and EPA to act aggressively against reproductive hazards, suggest the need to pursue other avenues of control. The available self-help mechanisms for both preventive and compensatory relief can provide an important complement to agency regulation. On the one hand, they can provide economic — and, in the case of injunctive relief, judicially imposed — incentives for changes in industrial behaviour. Further, by focusing attention on a particular problem, they can be an important impetus for a comprehensive regulatory response.

In utilising and refining the various regulatory and legal mechanisms discussed here, however, one cannot afford to lose sight of the underlying political context. These remedies developed, in large part, out of a strong and organised concern for work place health and safety. Without a concentrated effort to maintain that level of concern, we could see some of these avenues of relief narrowed, or even eliminated. Thus, it is perhaps the extent to which they can be used successfully as political, as well as legal, tools that will ultimately determine the extent to which these mechanisms are useful in safeguarding the reproductive health of workers and their offspring.

NOTES

- 1. 29 U.S.C., Section 650, et seq. (1970).
- 2. 15 U.S.C., Section 2601, et seq. (1970).
- 3. 29 U.S.C., Section 655(b) (1970).
- 4. The courts have long recognised the fact that mental and emotional trauma can grow out of physical injury, and have allowed recovery for damages for such trauma in both tort and worker compensation action. See Charles N. Miller, Recovery for psychic injuries under worker's compensation, Case and Comment, 87, No. 5, 40 (1982), for a recent discussion of this topic. There

is no reason to believe that Congress was unaware of this precedent when it passed OSHAct, and there is nothing in the language of Section 6(b) to indicate a limitation to purely *physical* consequences of work place exposures.

- 5. Although it is not clear whether a reproductive hazard which affects only future offspring, and not the workers themselves, is subject to regulation under OSHAct, the Court of Appeals for the District of Columbia Circuit has indicated that both 'workers' and 'the children they will hereafter conceive' must be given consideration in the setting of permanent and temporary standards under OSHAct. Public Citizen v. Auchter, No. 83-1071, United States Court of Appeals for the District of Columbia, Slip Opinion, at 6 (15 March 1983). As a practical matter, the court may well be giving tacit recognition to the emotional damage suffered by the worker who must face the knowledge that his or her future children may be damaged by a current work place exposure.
- 6. A medical removal protection provision should thus be distinguished from a simple medical removal provision, such as is mandated for vinyl chloride [29 CFR, Part 1910.1017(k)(5)], which does not include wage or seniority protections, and from the various employee exclusion policies instituted by many employers, without OSHA directive or authorisation, whereby fertile workers (usually women) are simply removed from their jobs. OSHA has thus far declined to develop a generic MRP policy.

United Steelworkers of America v. Marshall, 647 F.2d 1189, 1230 (D.C. Cir. 1980). Cert. Den. U.S. Supreme Court 80-1134, Lead Industries Association Inc., et al. v. Donovan, 29 June 1981, 49 Law Week, 3629.

8. 29 U.S.C., Section 654(a)(I) (1970).

- 9. Reportedly, employers who have implemented exclusionary policies of this nature include: Amax, American Cyanamid, Dupont, General Motors, B. F. Goodrich, Olin, Sun Oil, Gulf Oil, Bunker Hill Smelter, Union Carbide, Allied Chemical, Monsanto, TWA and Dow Chemical. The Lead Industries Association is reported to have endorsed this 'female exclusion' approach in 1974. (Joan E. Bertin, Discriminating against women of childbearing capacity, paper presented at the Hastings Center, 8 January 1982, p. 2.) For a rather reasoned discussion of some of the social issues raised by this trend, see Ronald Bayer, Women, work and reproductive hazards, The Hastings Center Report, October 1982, p. 14.
- 10. The standard for DBCP is found at 29 CFR 1910.1044. Appendix A to this regulation, at Section II.B.2, notes that: 'Prolonged or repeated exposure to DBCP has been shown to cause sterility in humans.'
- 11. The lead standard is found at 29 DFR 1910.1025, with a specific discussion of reproductive effects at Appendix C, Section II, 5. The inclusion of an MRP provision intended to protect, inter alia, against reproductive damage is a clear acknowledgement that such damage can occur under the permissible exposure levels.
- 12. The medical removal protection provision is found at 29 CFR 1910.1025(k). Although the automatic removal provisions (based on particular blood-lead concentrations) will not necessarily protect against reproductive damage, the general removal provisions are applicable: '... temporary medical removal may in particular cases be needed for workers desiring to parent a child in the near fugure or for particular pregnant employees. Some males may need a temporary removal so that their sperm can regain sufficient viability for fertilization ...'.
- 13. Three examples are: 4, 4-methylene-bis(2-chloroaniline), 29 CFR, Part

- 1910.1005 (since deleted); 2-acetylaminofluorene, 29 CFR, Part 1910.1014; and N-nitrosodimethylamine, 29 CFR, Part 1910.1016.
- 14. 29 U.S.C., Section 652(B).
- 15. Industrial Union Department, AFL-CIO v. American Petroleum Institute, 448 U.S. 671 (1980).
- 16. 15 U.S.C., Section 2603(b) (2)(A) (1976).
- 17. 15 U.S.C., Section 2603(a) (1976).
- 18. 15 U.S.C., Section 2604(a) (1976).
- 19. 15 U.S.C., Section 2604(e) and (f) (1976).
- 20. 15 U.S.C., Section 2606 (1976).
- 21. 15 U.S.C., Section 2605 (1976).
- 22. 15 U.S.C., Section 2604(f) (1976).
- 23. 15 U.S.C., Section 2603(f) (1976).
- 24. 15 U.S.C., Section 2608 (1976).
- 24(a). 29 CFR 1910 March 19, 1982.
- 24(b). 29 CFR 1910.20 May 23 1980.
- 24(c). 15 U.S.C.A. Section 2607(e).
- 25. For a detailed discussion of the right to refuse hazardous work, see: Nicholas A. Ashford and Judith I. Katz, Unsafe working conditions: employee rights under the Labour Management Relations Act and the Occupational Safety and Health Act, 52 Notre Dame Lawyer 802 (1977).
- 26. 29 U.S.C., Section 157 (1970).
- 27. For a more detailed discussion of this issue, see Ashford and Katz, supra, at note 48, pp. 803-805.
- 28. 29 U.S.C., Section 143 (1970).
- For a more detailed discussion of this issue, see Ashford and Katz, supra, at note 48, pp. 805-818.
- 30. 29 U.S.C., Section 660(c) (1970).
- 31. 29 C.F.R., Section 1977.12 (1973).
- 32. Whirlpool Corporation v. Marshall, 445 U.S.C., 21 (1980).
- 33. The right to refuse hazardous work appears to have been extended to reproductive hazards in Canada. The Labour Minister has recently ruled that a pregnant employee who left her job because she felt that a hepatitis risk at the work place posed a danger to her unborn child had properly exercised her right to refuse unsafe working conditions under the Canadian Occupational Health and Safety Act. The Minister is reported to have ruled that, because 'there is no distinction between a pregnant worker and her unborn child', the fetus may be protected under the Act even though there is no specific provision of such protection. See Women can refuse if fetus in jeopardy, At the Source, Ontario Foundation of Labour, Occupational Health and Safety Centre, Vol. 4, No. 2 (March/April, 1983). For a discussion of the right to refuse hazardous work in Canada, see Brown, Canadian occupational health and safety legislation, 20 Osgoode Hall Law Journal 90, 96-102 (1982).
- 34. Whirlpool, supra, see note 32.
- 35. For a more detailed discussion of this issue, see Ashford and Katz, supra, at note 48, pp. 831-835.
- 36. ibid., p. 806, and the cases cited therein.
- 37. The regulation creating the right pertains only to situations 'when an employee is confronted with a choice between not performing assigned tasks or subjecting himself to serious injury or death...', 29 C.F.R., Section 1977 12(6)(1) (1973) [emphasis added].

- 38. Section 7 on NLRA speaks broadly of the rights of employers to organise for their 'mutual aid or protection' [emphasis added], and the overall spirit of the Act is freedom from coercion, both physical and emotional.
- 39. 42 U.S.C., Section 2000e(k) (1978). This section, known as the 'Pregnancy Discrimination Act', was a Congressional response to General Electric v. Gilbert, 429 U.S. 125 (1977), where the Court held that pregnancy was not a sex-related disability. See, e.g., Mattson, The pregnancy amendment: fetal rights and the workplace, Case and Comment, 86, No. 6, 33 (1981).
- 40. Five somewhat divergent viewpoints, all coming to this same general conclusion, are represented in the following articles and papers: Joan E. Bertin, Discrimination against women of childbearing capacity, presented at the Hastings Center, 8 January 1982; Lynn Paul Mattson, The pregnancy amendment: fetal rights and the workplace, Case and Comment, 86, No. 6, 33 (1981); Gary Z. Nothstein and Jeffrey P. Ayers, Sex-based considerations of differentiation in the workplace: exploring the biomedical interface between OSHA and Title VII 26, Villanova Law Review 239 (1981); Wendy W. Williams, Firing the woman to protect the fetus: the reconciliation of fetal protection with employment opportunity goals under Title VII, 69 The Georgetown Law Journal 641 (1981); Nina Stillman, The law in conflict: accommodating equal employment and occupational health obligations, presented at the American Occupational Health Conference, Anaheim, California, 2 May 1979; and V. Bor, Exclusionary employment practices in hazardous industries: protection or discrimination?, 5 COL. JOUR. ENV. L. 97 (1978). As noted by Ronald Bayer of the Hastings Center, underlying the Title VII furore over female exclusionary policies is 'a recognition that the American economy so limits the possibilities of its woman workers that they would demand, as a sign of liberation, the right to share with men access to reproductive risks'. Bayer, op. cit., p. 19, supra, at note 9.
- 41. The only circuit court decision that construes the 1978 amendment in the context of a fetal protection policy is Wright v. Olin Corp., 697 F. 22 1172 (4th Cir. 1982). Under Olin's 'fetal vulnerability' policy, all women up to age 63 are assumed to be fertile, and are excluded from certain jobs which may require exposure to teratogenic or abortifacient agents unless Olin's doctors determine that they cannot bear children. In addition, most pregnant women are excluded from certain other jobs which involve more limited exposure to these substances, and non-pregnant women may work in such jobs only after signing acknowledgement of risk. In reversing the district court [EEOC and Olin Corp., 24 FEP Cases 1646 (W.D.N.C. 1980)], the Fourth Circuit held that, 'the existence and operation of the fetal vulnerability program established as a matter of law a prima facie case of Title VII violation' (697 F22 at 1187). The court remanded the case to the district court to allow Olin an opportunity to attempt to demonstrate that the policy was justified by business necessity. See note 48, infra. In Hayes v. Shelby Memorial Hospital, 2d FEP 1173 (N.D. Al a, 1982), federal district court in Alabama invalidated a 'fetus protection' policy under Title VII; the case is at present on appeal to the Eleventh Circuit (No. 82-7296). A Title VII challenge to the American Cyanamid 'fetus protection' policy is at present pending before the U.S. District Court for the Northern District of West Virginia (Christman v. American Cyanamid, Cause No. 80-0024). Two pre-amendment cases involving a General Motors policy were apparently settled in the U.S. District Court for the Southern District of Indiana (EEOC v. General Motors, Cause No. 76-53B-E, and Toomer v.

General Motors, Cause No. 76-101-0), but more recently the EEOC appears to have taken a less activist stance in challenging policies that exclude pregnant or fertile women from the work place.

42. U.S.C., Section 2000e-5(k) (as amended, 1972).

43. The defence arises from statutory language. See 42 U.S.C., Section 2000e-2(e) (1976). Principal cases defining the defence are: Arrit v. Grisell, 567 F.2d 1267, 1271 (4th Cir. 1977); Usury v. Tamiami: Trail Tours, 531 F.2d 224, 236 (5th Cir. 1976); and Hodgson v. Greyhound Lines, Inc., 499 F.2d 859 (7th Cir. 1974). Mattson, supra, at note 61, p. 34 (see note 40, supra), argues that the defence will not be successful in 'fetus protection' cases 'unless it can be shown that there is a definite nexus between pregnancy risks and job performance, as opposed to a potential risk to the fetus'.

44. The business necessity defence was judicially created. See Griggs v. Duke Power Co., 401 U.S. 424, 431 (1971).

45. The Supreme Court has characterised the BFOQ defence as an 'extremely narrow exception' to the prohibition against sex discrimination: Dothard v. Rawlinson, 433 U.S. 321, 334 (1977). In Griggs v. Duke Power Co., 401 U.S. 424, 431 (1971), the Court characterised the business necessity test as requiring a 'manifest relation to the employment in question'; in Albermarie Paper Co. v. Moody, 422 U.S. 405, 425 (1975), the Court indicated that the availability of an alternative policy which would meet the same business necessity 'would be evidence that the employer was using [the challenged policy] merely as a "pretext" for discrimination'. See also Robinson v. Lorillard Corp. 444 F20 791 (4th Cir.), cert. denied, 404 U.S. 1006 (1971).

46. Again, though they do not always agree on particulars, this is the general conclusion reached by the commentators cited supra at note 83.

- 47. The defence was developed by the Supreme Court in conjunction with the court's recognition that an employment practice that was neutral on its face could still violate Title VII if it was discriminatory in its effect: Griggs v. Duke Power Co., 401 U.S. 424, 431 (1971). The court has not extended the defence to racially discriminatory policies.
- 48. Wright v. Olin Corp., supra, 697 F.2d 1172. In describing Olin's 'fetus vulnerability' policy as 'gender-neutral', the court appears to have rejected the argument that discrimination on the basis of childbearing capacity was sex discrimination on its face, and thus to have found the policy discriminatory only in its effect. As noted, application of the business necessity defence would be consistent with such a determination of racial neutrality. The court indicated that protection of the fetus was an appropriate business purpose under that defence: '... we believe the safety of unborn children is ... appropriately analogized to the safety of personal service customers of the business . . . we cannot believe that Congress meant by Title VII absolutely to deprive employers of the right to provide any protection for licensees and invitees legitimately and necessarily upon their premises by any policy having a disparate impact upon certain workers. 697 F.2d at 1189. In setting forth guidelines for cases of this nature, the court indicated that the burden of establishing the defence is on the employer, that it must be established by independent, objective evidence, and that it must be supported by the opinion evidence of qualified scientific experts. The court further indicated that the employer need not show a scientific consensus, but must show that there is so considerable a body of opinion that (1) significant risk to unborn children exists and (2) such risk is confined to the exposure of women workers, that an informed employer could not

responsibly fail to act. Finally, the court indicated that the defence, if established, may be rebutted by proof of acceptable alternative policies or practices.

- See Nothstein and Ayers, supra, note 40, at 306-312; and Williams, supra, note 40, at 667-678.
- 50. The Western District of Michigan has offered the following statement of the law: '... in evaluating employment practices subsequent to [the Pregnancy Discrimination Act], policies which create distinctions or discriminate on the basis of pregnancy are in violation absent a showing of a bona fide occupational qualification' (Thompson v. Board of Education of Romeo Community Schools, 526 F. Supp. 1035, 1039 [W. D. Mich. 1081]).
- 51. Although the rather direct language of the Pregnancy Discrimination Act would appear to be central to any analysis of the treatment of 'fetus protection' policies under Title VII, the court does not address this language in any detail. The apparent inconsistency between it and the court's position may well be reconcilable, but the rationale for such a reconciliation does not appear to be found in the decision. Rather, the court simply notes that if it were to limit the employer to the BFOQ defence, it would 'prevent the employer from asserting a justification defense which under developed Title VII doctrine it is entitled to present' (697 F.22 at 1185, note 21).
- 52. Wendy Williams, supra, note 61 (see note 40, supra).
- Clement Associates, Inc., Chemical Hazards to Human Reproduction, prepared for the Council on Environmental Quality (January, 1981), pp. VII-4. See also Judith S. Bollin, Genes and gender in the workplace, Occupational Health and Safety, 16 (January 1982).
- 54. Williams, supra, note 61, pp. 703-704.
- 55. A general discussion of the availability of injunctive relief to abate work place hazards can be found in Alfred W. Blumrose et al., Injunctions against occupational hazards: the right to work under safe conditions, 64 California Law Review 702 (1976), 1 Industrial Relations Law Journal 25 (1976).
- 56. See Michelle C. Mentzer, Industrial Relations Law Journal, 5(2), 247-282 (1983).