

**OCCUPATIONAL  
EXPOSURE LIMITS**

**SUBMISSION  
TO THE  
MINISTRY OF LABOUR**

**BY THE  
ONTARIO FEDERATION  
OF LABOUR**

**November, 2004**

The Ontario Federation of Labour (OFL) is the central labour organization in the province of Ontario. It has an affiliated union membership of over 650,000 members from all regions of the province. With most unions in Ontario affiliated, membership includes nearly every job category and occupation.

As a province-wide central labour body, the OFL works to develop and coordinate policy as passed at our conventions and by our executive bodies. One of the key roles of the OFL is to try to influence public policies that affect all working people, their families and communities. One of the most important areas of public policy that we try to influence is the prevention of work related injuries and illnesses, including occupational cancers.

We welcome the opportunity to comment on these latest proposed revisions to the Regulation respecting Control of Exposure to Biological or Chemical Agents (O.Reg. 833).

## **Introduction**

If we are to prevent future occupational disease, we must aim now to reduce the use of existing toxic substances or processes and provide the framework for development of new, non-toxic substances and processes in production. This goal has much in common with environmental objectives. The successful reduction of toxic substances and processes in the workplace will also play a key role in diminishing environmental pollutants.

## **Statement of Environmental Values**

We noticed that the Ministry of Labour (MOL) has prepared a Statement of Environmental Values as is prescribed under O. Reg. 73/94. According to the statement, one of the ways that the MOL contributes to the environmental well-being of the province is "**encouraging the substitution of hazardous substances with those that are less hazardous.**"

At face value this was an encouraging statement. Unfortunately our review of the Policy and Procedures Reference Manual of the Operations Division for the Ministry of Labour dated June 1, 1998 (with updates to February 2003) finds that there is no direction to the inspectorate to actually do this. The OFL has since, on two occasions, canvassed our affiliates and has not been able to find a single occasion in which the MOL has actually been "encouraging the substitution of hazardous substances with those that are less hazardous." We can only conclude that the MOL has not incorporated this commitment into its activities in the field. This is a concern for us since the statement makes it seem that this is a routine and on going part of the work of the MOL when it clearly is not.

We hope that the MOL will now take steps to actually follow through on this commitment and not simply delete it from their Statement of Environmental Values.

## **Mandatory Substitution**

While a policy of “encouraging the substitution of hazardous substances with those that are less hazardous” would be a nice first step, we feel very strongly that mandatory substitution is needed to drive toxic use reductions to protect the health of workers. The results of a recent survey by KPMG interestingly enough supports our position. The KPMG Canadian Environmental Management Survey of Canadian Corporate Executives reported:

- 16% were motivated to take action on environmental issues when government program were voluntary and
- 95% were motivated to take action on environmental issues to ensure compliance with government regulations.

The Canada Labour Code and regulations in Newfoundland and Quebec contain substitution requirements. British Columbia also has a limited requirement for substituting toxic substances.

In the U.S.A., Massachusetts established the Toxics Use Reduction Act in 1989. This law encourages reductions in the amount of toxins used and generated as a result of an industrial process or operation. It is reportedly the preferred mechanism for complying with all legislation governing worker and environmental health and applies to companies with ten or more full-time workers manufacturing 25,000 pounds or more of a “reportable” toxic substance. TURA requires companies to report on toxin use, not toxin release. Central to TURA is a facility based plan to reduce toxins.

Massachusetts also provides support for these facilities or companies in the form of training and research into alternative substances. The information accumulated over an eight year period and reported in 1997 demonstrated that companies generated 41 per cent less toxic waste and reduced use of toxic chemicals by 24 per cent.

Ontario would not be breaking new ground by bringing in substitution requirements. Clearly the MOL would need to work with other ministries to introduce in Ontario what has been working in Massachusetts for many years.

## **Labour’s Concern Over the Use of TLVs**

Our position on the use of the ACGIH TLVs as legal limits is well documented with the Ministry of Labour. We have provided detailed critiques of these limits and the MOL practice of relying on them to protect workers. Our submission to the MOL in March of 2000 on the proposed revisions to the Occupational Exposure Limits provided this

information. We do not feel it necessary to reproduce that information as our position has not changed and we refer the Ministry to that document for the details.

We will simply say that the ACGIH TLVs the MOL is proposing have been set at levels that protect the interests of employers, not the health of workers.

This reason alone is sufficient for us to oppose any increase in exposure limits for Ontario workers.

### **As Low As Reasonably Achievable**

The As Low As Reasonably Achievable (ALARA) principle is widely used in the nuclear industry to reduce worker exposure to levels much lower than the legal limit. The use of OELs tends to be interpreted as permission to expose workers up to the limit. Legal exposure limits, when they are obeyed at all, tend to be treated like highway speed limits. That is, if the employer finds the workplace at or below the limit, then there is no incentive to reduce exposure further, even when the limits are known to be inadequate. It would be better to treat exposure limits like minimum wage legislation as a minimum standard upon which most workplaces should be expected to improve.

The evidence that the ACGIH TLVs will not protect the health of workers is clear. The government should introduce the ALARA principle as another tool to control worker exposure to toxic substances.

### **Action Limits**

The use of "action limits" to trigger exposure reduction efforts before the Time Weighted Average (TWA) limit is reached should be another tool to protect the health of workers. Once again we addressed this in detail in our March 2000 submission.

### **Prior Toxicity Testing**

One method of preventing new toxic substances or processes from being introduced into the workplaces is to require prior toxicity testing. The requirement to add toxicity testing to the research and development phase of new products and processes will help to bring occupational health concerns into the earliest stages of planning and design of production instead of being afterthoughts.

Prior toxicity testing is an important part of a preventive regulatory strategy to stop the introduction of new, highly toxic substances into the workplace. It forces health and safety

considerations to the top of the agenda in the introduction of new substances to the workplace and to the economy.

## **Bio-Hazards**

One very important method for protecting workers from bio-hazards is to introduce a regulation requiring the use of safety engineered sharps. Saskatchewan has already announced this requirement. Ontario should follow this lead.

## **Construction**

Those working in the construction trades do not have even the same minimal protection for toxic substances provided to workers in other sectors.

These proposed limits will not protect the thousands of workers who work in the construction trades as construction projects are exempt from the regulations the Ministry intends to revise.

Section 2 of Ontario Regulation 833 Respecting Control of Exposure to Biological or Chemical Agents specifically excludes construction workers from any restriction in the amount and duration of exposure to hazardous chemical substances in their workplaces. This section reads, "This regulation does not apply at a project to an employer who primarily carries on the business of construction or to workers of such employer."

If the Ministry of Labour is serious about its stated commitment to make Ontario workplaces among the safest in the world, it needs to end this discrimination against construction workers. It can begin to provide real health protection for these workers by removing this section of Ontario Regulation 833.

We made this statement in our submission more than four years ago and were ignored. Now more construction workers have paid for this government inaction with their health and possibly their lives. The recent outrageous exposures of construction workers at the Weyerhaeuser Mill in Dryden show how desperately these workers need legislation to protect their health. These exposures were allowed to go on for months and resulted in the hospitalization and poisoning of many of those workers. This callous disregard for human health by the government is reminiscent of the human tragedy involving asbestos exposures at Johns-Manville, Bendix, Matachewan, Holmes and others with the tacit approval of the Ontario government of the day. We fail to see how anyone in authority at the mill, the general contractor or even the MOL could successfully argue that they exercised due diligence and reasonable care to protect the health of those workers.

The transient nature of the trades means that those workers who exercise the right to refuse hazardous work, quickly find their services are no longer required on the site. Those who have a history of refusing hazardous work on construction sites can find themselves blacklisted and unable to find work in their trade. The prohibition against employer retaliation on workers exercising their rights under health and safety legislation means little in the construction industry.

### **Agricultural Workers**

These workers are specifically excluded from the protection of Ontario's *Occupational Health and Safety Act* and regulations.

In keeping with the Ontario Federation of Labour's position that all workers should be protected under the *Occupational Health and Safety Act*, we are requesting that this government act to remove the exemption which excludes farm workers from the protection of the occupational health and safety legislation, including the occupational exposure limits as well as the Workplace Hazardous Materials Information System (WHMIS). This can be done by regulation without amending the *Act*.

A recent series of articles in the London Free Press has shown in a very public way the need to protect farm workers under the *Act*.

### **Secondary Victims**

Controls protecting workers also protect family members and those in the surrounding community. The spread of toxins is not stopped at the employer's door. Toxic substances are often unknowingly brought home, exposing members of the worker's family. There are known cases where spouses and children of asbestos workers have died as a result of contracting mesothelioma. The only known cause of mesothelioma, a cancer of the lining around the lungs, is inhalation of asbestos fibres.

In addition, many substances affect the reproductive outcomes of workers and their spouses. These outcomes include visible birth defects, learning disabilities, or problems with social integration. For women workers, even after delivering a healthy baby, there is the issue of breast milk contamination. Some toxic substances are stored by the body in the tissues of a woman that are used to produce milk. These contaminants then concentrate in the breast milk. In the case of the environmental contaminant, dioxin, the average breast-fed baby receives its total recommended maximum lifetime dose of dioxin in the first six months of its life.

Providing workers with real protection from toxic substances will also reduce the toll of secondary victims. Unlike working people, these victims have the right to sue for damages.

### **Protective Reassignment**

Quebec has had a requirement for protective reassignment for pregnant women or nursing mothers for many years. This provision is very important for women workers and their children who may be exposed to harmful chemicals. The Canada Labour Code also has provisions providing protective re-assignment of pregnant and breast-feeding workers. Ontario needs a similar provision to protect the workers and their children.

Recent research involving the Motherisk Program at the Hospital for Sick Children in Toronto has demonstrated that the children of women exposed to organic solvents in the workplace had neurodevelopmental problems as a result. This research published in the journal, Archives of Pediatrics and Adolescent Medicine in October 2004, found that these children have poorer language, memory and attention skills and were more hyperactive. The researchers concluded, in part, "that reducing exposure in pregnancy is merited."

Previous research has also found that children exposed in utero to workplace toxins suffered lasting effects from those exposures including major foetal malformations. Other researchers have concluded that women's exposure to organic solvents should be minimized during pregnancy.

Given the scientific evidence, the MOL has a moral obligation to protect the next generation by passing protective reassignment legislation for pregnant women and nursing mothers.

Also the proposal to increase the OELs for solvents given this information is simply outrageous. We cannot support increasing exposures to these toxic substances.

### **Other ACGIH Guidelines**

The ACGIH TLV booklet has sections dealing with ergonomics, ionizing and nonionizing radiation fields, thermal stress and acoustic limits. The MOL should adopt these limits in addition to the TLVs.

The regulation should also contain a clause requiring any new or existing ventilation system intended to limit inhalation exposure to a regulated substance to meet or exceed the applicable design specifications and operating parameters recommended in the ACGIH Industrial Ventilation Manual.

## **Precautionary Principle**

The precautionary principle is an approach to eliminating hazards before they cause harm. We have provided detailed comments on this in our previous submission and refer the MOL to that section.

One of the most substantive developments in this area is new legislation entitled Recognition, Evaluation, Authorization of Chemicals (REACH), which has been proposed by the European Union. This initiative attempts to remedy the prevailing policy failure that has allowed thousands of substances to be introduced into workplaces without adequate knowledge about their environmental or health effects. REACH explicitly restricts the use of carcinogens and mutagens, and forces consideration of alternatives as part of the chemical licensing process. Anticipating its enactment in 2006, companies in Europe and North America have begun phasing out high concern chemicals.

This government has an opportunity to become proactive in the approach to protecting the health of working people and their families. This can be done by adopting the precautionary principle approach to the introduction of new substances, processes or job designs into a workplace.

## **Banning/Licensing Toxic Substances**

Prohibiting or restricting the use of highly toxic substances is an effective method to protect workers from the unnecessary use of highly toxic substances. Implementing a licensing system for these substances when there is a demonstrated need for their use with requirements to protect workers can be a very effective control strategy. Employers using such substances will be registered and this can be used as part of an enforcement strategy. Employers who do not properly protect workers exposed would stand to lose their right to use the substance.

## **Extended Producer Responsibility**

Extended Producer Responsibility (EPR) shifts the burden for recycling products discarded by consumers from the public sector back to the private sector, or rather the original manufacturer. This way, manufacturers are inspired to implement design changes that incorporate effective material and product recycling and reuse. To realize this level of effectiveness manufacturers would in turn look to reduce or eliminate toxins that would potentially contaminate reusable material.

Two prominent examples of EPR legislation are European Union directives for automobiles and electronic and electrical equipment waste. Under the Directive on End-of-Life Vehicles, vehicles on the European market after July 2003 may not contain lead, cadmium, or hexavalent chromium. Accompanying the Waste Electrical and Electronic Equipment Directive (WEEE Directive) which was adopted in February 2003, is another entitled the Directive on the Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS Directive). This directive prohibits the use of lead, mercury, cadmium, and hexavalent chromium in any new electrical and electronic equipment on the market after July 1, 2006.

Environment Canada has been promoting EPR primarily as a method of waste diversion. We recognize that EPR would involve more than just the MOL but there is an opportunity for the MOL to take a leadership role in a provincial EPR initiative as a means to drive toxic use reduction. This would lead to better protection for the health of workers and communities.

## **Enforcement**

Enforcement of Ontario's occupational health and safety legislation is a vital element of a comprehensive approach to occupational health and safety. This is another area that the OFL has provided detailed comments on in both our March 2000 document and our "Labour's Program For an Effective Enforcement System" and we refer the MOL to those documents for the details of our position.

We do feel that the announced hiring of 100 new inspectors and an additional 100 enforcement staff is an important step forward. Some of these additional staff will need to be individuals with training and experience in occupational health such as occupational hygienists, air quality technicians, etc. The inspectors will need these resources in occupational health if they are to be effective.

The OFL has reviewed the amendments to the Criminal Code of Canada brought in by Bill C-45. We wonder, does the Ontario Ministry of Labour fall within the definition of "organization" as a public body? If so, shouldn't the senior officers of the Ministry be exercising due diligence and reasonable care to ensure that the health and lives of working people are properly protected?

This is of particular interest for issues where the science regarding harm is clear, such as the harm to children of working mothers, resulting from exposures in utero. Could the failure of the Ministry of Labour to act and provide protective reassignment legislation in the face of scientific evidence of harm be considered negligence for the purposes of the Criminal Code?

## **Metalworking Fluids**

We provided detailed comments on our position regarding these fluids in our March 2000 submission so we do not need to repeat them here. This government needs to act now to provide better protection for workers from this known human carcinogen.

## **Diesel Emissions**

This is another issue on which we have previously provided detailed comments. Again we refer the MOL to our March 2000 submission. We will simply say here that the scientific evidence linking diesel emissions to ill health is overwhelming. The government must act now to protect workers from this toxic, human carcinogen.

## **Occupational Health Resources**

Increasing efforts by unions and community groups to prevent occupational disease, legislative changes and the increase in public awareness that these generate are placing greater demands on the resources of the Occupational Health Clinics for Ontario Workers (OHCOW) as well as the Workers Health & Safety Centre (WHSC). The funding for OHCOW & WHSC should be increased to allow them to improve the resources necessary to respond to the emerging trends around occupational disease.

## **Process-Specific Regulations**

Process-specific regulations are another area we provided detailed comments on in March 2000. We continue to support this concept and refer the MOL to that document.

Respectfully submitted by

**THE ONTARIO FEDERATION OF LABOUR**