

# Civil Defence in Industry

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IT is not the purpose of this article to discuss civil defence in its general application on a nationwide basis, but confine its scope to certain salient features with regard to industry and commerce.

It must be borne in mind continually that civil defence is a disaster organization, comprising all measures necessary to minimize the effect of disaster, whether it be from natural or other causes; or from a deliberate attack by an aggressive enemy.

Looking at it broadly, it means an organization having as its aim to maintain the morale of the population, to prevent or reduce disruption of essential production, to keep public utilities functioning and to ensure that civil government at all levels can continue to govern.

In other words, a civilian defence organization needs to be built within the framework of existing governments, but it does not relieve any section of society subscribing to democratic principles of its own responsibilities.

In our democratic society each individual, each institution and each community accepts certain responsibilities; otherwise it would not be democracy. Each of these communities elects certain individuals who are charged with the responsibility of government. This principle ascends the whole scale of civil government to federal level. The point which must constantly be borne in mind is that responsibility in a democracy is collective throughout; otherwise it becomes a dictatorship.

This is the basic principle on which Canada's civil defence organization and

plans are being developed, and this can rightly be called the principle of self-help and mutual aid.

One of the aims of a civil defence organization as indicated above, is to ensure the least possible disruption to essential production necessary for the nation's needs. This means there must be a system whereby complete disorganization, particularly due to enemy attack, is reduced to a minimum—and also that, after such disaster, production can continue. The best safeguard of all would be one wherein industrial plants were so dispersed as to offer a very limited target for the risk involved to an enemy. This is a very real possibility but requires long term planning, coupled with the willingness of public authorities and industry to comply.

This dispersal of industry does not mean the uprooting of population and moving of industrial installations. It does not mean moving to remote parts of the country. What it does mean is for cities to ensure in their own plans of future development the break-up of the solid masses of houses and industry that continue to grow in haphazard manner. By creating numerous green belts of a mile or two in width and a series of self-contained communities, thus target factors are reduced materially.

Old established industries contemplating re-building or expansion would be well advised to select other sites. A program such as this over a course of twenty-five years would result in a very material change in this country as to its potential targets. It would also result in elimination of slum

conditions and produce better living and better citizens with an increase of national wealth.

## II

**W**HAT we have just pictured is the ideal as we see it. But that ideal is not now. Therefore, our immediate problem is to consider how best production can be continued, having suffered in one way or another from attack.

Two things are necessary:

1. Organization and development of a system which will minimize casualties and protect essential machine tools or vital installations.

2. Organization of measures to restore facilities for operation with the least possible delay.

This indicates an industrial plant protection program.

While this is a responsibility of the management, it is essential that it should be fitted into the civil defence program of the local authorities wherein the industry is located.

It is assumed that in any community setting up a civil defence organization, civic planning committees will include industrial representation. This is most important. Large industries normally have their own security measures, and the heads of these industries should constitute an executive committee for plant protection.

The first step for an industrial firm would be to make a definite survey, ascertaining the most vulnerable parts of the plant, the fire fighting resources and the possibility of shelters for workers. Then it is possible to decide where blast walls could be erected to protect vital machinery and where tarpaulins could be used to protect machinery against the fall of rubble. Similarly, suitable storage can then be arranged for loose tools since these may become missiles.

A highly responsible employee should be placed in charge and there should be one or more control points safely constructed according to the size of the plant wherein

telephones and other communications may be housed.

There should be organized and trained teams for rescue work should the need arise, teams for first aid, auxiliaries to the already existing fire fighting services, and an adequate warning system.

Having achieved this, then there should be time set aside for practice drills in order that workers, in the event of an alarm, can systematically and without confusion proceed to their shelters and wait.

In co-ordination with the over-all civil defence organization of the community wherein certain elements are trained especially for restoration work—e.g. the pioneer section of the civil defence division of a city—a careful plan is necessary to ensure the restoration of public utilities to feed the needs of the industry concerned. The above are some of the main essentials in plant protection and it may be mentioned here that within our system of warning the large industries will receive the same degree of alert as a civil defence controller.

## III

**T**HE commercial establishments, particularly in the wholesale and retail commodity field, on a large scale present a very different picture. Large warehouses and storage facilities grouped closely together become very easy targets.

The answer is dispersion. This may not be practicable, but it would be advantageous if highly combustible commodities could be segregated. While this presents an extremely difficult problem requiring the co-operation of many interests, it may nonetheless be an economy in the long run.

Here again employees in these large installations require shelter. No hard and fast rule can be given as to the type of organization necessary as it depends entirely upon the type of installation. Suffice be it to say some elements referred to in industrial plant protection apply equally here.

The docks in large harbors always provide a very tempting target due to con-

gestion, where small enemy effort can achieve great results. Oil storage installations are often clustered in very small areas, thereby constituting not only an ideal target but a tremendous risk. Here again dispersal is the answer, as and where it may be feasible. But in any event installations having commodities of a highly explosive and inflammable quality should not be within close proximity of main dockage.

Other measures in the past have achieved some degree of success when the situation permits their use. Most of those are aimed at making the target difficult to find by visual means, through the use of blackout and deception methods. In our highly lighted and glassed-in factories of North America, blackout presents a very difficult problem. Certain industrial plants with blast furnaces likewise are not difficult to discover at night, although flame from the chimneys of blast furnaces

can be reduced. Deception does not mean painting buildings with odd colors. According to the experts in Europe, such effort is pure waste. However, there is a form of deception which was successful both in Germany and England—i.e., trying to make the factory look like something else—but only a few factories lend themselves to this. Another deception method which had considerable measure of success is that of establishing a dummy factory in the general location of the real one in the hopes that the enemy would be misled.

Civil defence, as the foregoing considerations suggest, consists of the preparation made in advance to minimize the effects of an attack, followed by remedial measures to restore functions to normalcy.

Civil defence does not prevent disaster or attack but without this organization the effects of disaster or attack may be multiplied many times.

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## *Neighbourly Advice*

“Canadians, of course, remember the desperately dangerous years when the U. S. was more isolationist than it was anti-Hitler. The record of 1939-41 leaves the U. S. in no position to exhort Ottawa; in any case, exhortation is not the language of an old and intimate friendship. But when Canadians argue, as they do today, that their course is one of calculated risk, it is perhaps permissible for a good friend to suggest a second look at the odds.”

From “Comfortable Canada”,  
an Editorial in  
FORTUNE for November, 1950.