FEASIBL
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STANDARDS
SHEL
EC

Protection from radioac

The National Policy on shelt
states that, "In the ever
offer the best single
greatest number of our
series of studies and te
National Resear

"Adequate
radiation casualties

"Medical pr
death following exp
exist. There is
which would provid
small fraction of th

"There is ad
construction of effe

The princ ipal require
shelter o cupants and th
the more effective the p
the most readily availab
shielded by the earth ar
provides good shielding.
walls inc reases their pr

Other construction mate
clay tile filled with sand
wood, co ered with eart
shielding from fallout.

With our own engineering [illegible] developed numerous designs of [illegible] "The Family Fallout Shelter" [illegible] tion in the home. [illegible]

Designs for dual-purpose [illegible] and office buildings, [illegible] designs for shelters beneath [illegible] in subways are being [illegible] various materials manufactured [illegible] economical dual-purpose [illegible]

The American Institute [illegible] based on our designs, and [illegible] in Chicago in connection [illegible] exhibit in the coming [illegible] and Los Angeles.

We have also given technical [illegible] developed shelter designs [illegible] in housing developments [illegible]

Adequate fallout shelter [illegible] The lowest figure $2[illegible]

Where separate independent [illegible] cost may run $150 per person [illegible] between these two extremes [illegible] incorporated in new buildings [illegible]

What standards are required [illegible]

In planning for fallout protection [illegible] fallout contamination which [illegible] for humans, and the rate [illegible]

OCDM has undertaken [illegible] vary from those included [illegible] and builders to specify [illegible]

This chart indicates the [illegible] across Iowa after a 10-[illegible] Base near Omaha. The [illegible] percent fusion [illegible] conditions.

When a 10-megaton nuclear [illegible] the earth, an area of blast and [illegible] from ground zero during the first [illegible] the cross-hatched area of the [illegible] During the subsequent 18 hours [illegible] contaminated by fallout as shown by the [illegible] detonation, fallout would have [illegible] hours, about 300 miles to the [illegible]

Without fallout protection, [illegible] would die during the first three [illegible] the yellow and inner green shaded [illegible] which might incapacitate them for [illegible] the cumulative outside radiation [illegible] might be as high as 20,000 R. [illegible] Grinnell, 400 R; at Iowa City, [illegible]

Medical advice to OCDM is that [illegible] if the total radiation dose, spread [illegible] dose of more than 200 R will [illegible] radiation sickness.

Time is a factor in measuring the [illegible] some of the radiation damage. [illegible] over a period of weeks without [illegible] absorbed in a few days could [illegible]

In wartime, an individual receiving [illegible] to take as much as 900 R in a year [illegible] necessary, of course, to maintain [illegible] more or less evenly over the [illegible]

To keep radiation exposure below [illegible] sufficient protection in much of this [illegible] shielding afforded by the first floor [illegible] 200 miles from the point of explosion [illegible] the right side of the drawing, will receive [illegible] of that which exists in open areas. [illegible] the cumulative dose to people with adequate [illegible] for the first two weeks would be about [illegible] would be 100 R on the first [illegible]

At about 130 to 200 miles from [illegible] a home basement should [illegible] sickness. As indicated i[illegible] will reduce the radiation expos[illegible] Grinnell remained in the [illegible] interval, their radiation expos[illegible] Des Moines, the two-week exp[illegible]

However, better fallout protect[illegible] miles from ground zero. [illegible] basement concrete block shelt[illegible] shelter, which can reduce [illegible] adequate fallout protectio[illegible] remained in basement [illegible] dose of about 100 R during [illegible] of these cases, the [illegible]

In the event of a nuclear [illegible] United States. The fallout patte[illegible] complicated than this simplifie[illegible] greater radiation intensities th[illegible] where homes and home ba[illegible] However, there is no way of pr[illegible] we cannot advise that the [illegible] area will provide adequate p[illegible] to provide themselves wit[illegible] fallout shelter manual. [illegible] initial blast and thermal [illegible] war.

The success of a program [illegible] emergency services and, [illegible] monitoring and upon adeq[illegible]

OCDM's National Warning Syst[illegible] in every State within 96 s[illegible] systems spread the public warn[illegible] are alerted in minutes. [illegible] every day at North Ameri[illegible] military warning offices, [illegible]

We are strengthening this [illegible] system. Our ultimate [illegible] that all people w[illegible]

OCDM provides funds for [illegible] warning points in this National Warning [illegible] (NAWAS). [illegible] by State and local personnel [illegible] warning capability, OCDM also [illegible] basis for NAWAS extension [illegible] in each county.

Sirens and other warning [illegible] percent Federal funds [illegible] cities in the United States [illegible] remembered that sirens [illegible]

Considerable research has been [illegible] economical indoor warning [illegible] National Emergency Alarm Repeater [illegible] This system utilizes [illegible] individual homes and other [illegible] regarded as probable. [illegible] be reduced to 15 to 30 [illegible] to develop the maximum [illegible] relay of information [illegible]

Standard AM radio, [illegible] adjunct to the warning system [illegible] particularly valuable in [illegible] advising people when the [illegible]

We have a command communications [illegible] call-up at any time. [illegible] and the States. This system [illegible] the next year will have a radio [illegible] is placed in police and other [illegible] State systems have been improved [illegible] available under the OCDM [illegible] with the public will be provided [illegible]

A national radiological [illegible] public rapidly of danger [illegible] information upon which [illegible] and recovery actions [illegible]

A network of approximately [illegible] established across the [illegible] stations will be at Federal [illegible] remaining 144 thousand will [illegible] approximately 15 thousand [illegible] of 150 thousand stations [illegible] year 1963. The Office of [illegible] ing instruments required [illegible] Government employees.

OCDM and AEC have been [illegible] inexpensive home monitoring [illegible] Such instruments can be used [illegible] to estimate how long a [illegible] it is safe to leave.

OCDM announced last [illegible] radiation instruments for the [illegible] of two instruments and [illegible] to measure (1) dose rates [illegible] to more than 100 roentgens per [illegible] roentgens. OCDM is bearing [illegible] furnishing each State or [illegible] offer instruments to the [illegible]

OCDM research to improve [illegible] a suitable instrument is developed [illegible] packaging, distributing, and [illegible] purchase must be reliable [illegible] to be completed this year. [illegible] under consideration may [illegible]

We continue to utilize results of [illegible] prototype developments under [illegible] combined with a radio, and [illegible] given by a siren-like noise [illegible] detector in a radio. [illegible] than $20 and in the [illegible]

Citizens instruments [illegible] designated for operat[illegible]

Neither will the widespread [illegible] trained CD monitors. [illegible]

The National Policy o[illegible] or misrepresented. [illegible] specifically. It states:

"Governments [illegible] of warning as is pres[illegible]

(1) 'Evacuati[illegible] near assumed targets [illegible] plans for evacuation [illegible]

(2) "Shelter [illegible] full advantage w[illegible] protection wil[illegible]

3) "The ac[illegible]

State and local governments [illegible] have established evacuat[illegible] would permit evacuati[illegible] 2200 counties have dev[illegible]

We emphasize that eva[illegible] execute movement plan[illegible] dictate such action. [illegible] of shelter but neither [illegible]

This is the same tactic whic[illegible] conditions of nuclear w[illegible] explosion, their chance[illegible] if they are able to move [illegible] We would be derelict [illegible] moves when warning [illegible]

We are placing great emph
Evacuation plans should emphe
wherever possible. Some times
of intense radiation after an at

All of these programs -- warn
ing and movement -- together
defense mobilization -- have
National Plan for Civil De
"deter aggression, and in the
survive, recover and win.
until the fallout radioactivity
emergency crews to spend

In areas of heavy fallout
necessary for everyone to remain
individual family would ha
at the time of attack.

Government action during
Services." These include
limited emergency feeding

Later, as crews were able to
and Federal Governments
emergency feeding and other

We cannot say too bluntly
individual family and every
own.

Our economic system depends
across the nation. A city
able to meet the basic need

As these communities cann
Plan calls for States and cities
help for at least four weeks
call upon the Federal Gover

OCDM's overall respon[illegible] out by using the capabil[illegible] to plan. The Department of [illegible] food, Interior for fuel and [illegible]

These and other resource [illegible] Annexes, which have be[illegible] directors as wel[illegible]

Such problems or recover[illegible] more immediate surviv[illegible]

Announced on May [illegible] reasonable public accept[illegible] letters and inquiries regarding [illegible] obtaining appropriations [illegible]

The Federal role has [illegible]

1. Education, [illegible] which can be taken [illegible]

2. Survey of existing [illegible] the value of existing [illegible]

3. Research to know [illegible] in existing, as wel[illegible]

4. Prototype design and [illegible] research and demonstrat[illegible]

5. Leadership and examp[illegible] appropriate new building[illegible]

6. Incorporation of shel[illegible] funded).

I have touched on these p[illegible] taken in the field of [illegible] barrier and do everything [illegible] Government realizes the [illegible] involving Federal loan or grant[illegible]

1. The 1961 budget [illegible] shelters in all ne[illegible] suitable. $11 [illegible]

2. The Federal Housing [illegible] Administration have [illegible] eligible items in [illegible] In addition, FHA, [illegible] building of fallout [illegible]

3. The Housing and H[illegible] Facilities Adminis[illegible] be included in pro[illegible] under its College Hous[illegible] Program, and its [illegible]

4. The Departme[illegible] Public Health Serv[illegible] construction under the [illegible] tion of fallout shel[illegible]

5. The HHFA and the [illegible] "Master Planning" grant[illegible] the incorporation of fallo[illegible] In addition, local a[illegible] developmt impro[illegible] share of the proje[illegible]

6. The Public Hou[illegible] of ruling that fallout shel[illegible] housing projects up [illegible]

Survival [illegible] comes.

I have made here three [illegible]

First, fallout prote[illegible] the cost.

Second, the standards of [illegible]

And Third, fallout shelte[illegible] radiological defens[illegible]

January 25, 196[illegible]