

Confidential

outdated

Letter to Liverman
From Biler

CLASSIFICATION CANCELLED
OR CHANGED TO ~~Deleted~~
BY AUTHORITY OF DOE/DPC
I. L. CUCCHIARA
REVIEWED BY *JA* 4/13/29
DATE

Sub: Unresolved issues regarding off site
safety at Nevada Test Sites

On September 11, 1975, this Division gave
to MA for
reviewance ~~in~~ the Supplement to the Underground
Nuclear Testing Program Environmental Impact
Statement. This Supplement contains the office

radiological guidelines for ~~planning~~ ~~the~~ ~~test~~

~~for~~ for Operation Amos, the next test since ~~at~~ ~~1953~~

~~rad.~~ ~~about~~
~~radiation~~ ~~concentration~~ ~~with~~ ~~the~~ ~~guidelines~~

~~for a number of years~~ ~~since~~
~~and cannot support~~ ~~the~~ ~~test~~

~~application~~ ~~from~~ ~~the~~ ~~Department~~ ~~of~~ ~~Energy~~

~~The~~ ~~difficulty~~ ~~in~~ ~~effecting~~ ~~any~~ ~~change~~ ~~in~~ ~~policy~~

~~has~~ ~~been~~ ~~well~~ ~~known~~ ~~and~~ ~~the~~ ~~Department~~ ~~of~~ ~~Energy~~ ~~is~~ ~~not~~

Forest

Current office criteria for NIS have a long and involved history. Examples of recent correspondence are shown in Enclosures 2 through 4. Efforts to ^{working} ~~working~~ ^{management} with NV promote a cooperative ~~relationship~~ ^{to develop} new guidance have not been successful. Within the past month we find ^{that} while NIS and NV staff may be willing to new guidance would not be developed work on new criteria, this would not be done for the ^{rather} ~~time~~ ^{time} upcoming winter but to apply after this, i.e. in about a year from now. Enclosures 5 through 11 are samples of correspondence giving the history of the current criteria.

and MHA,
is that ~~staff~~ of NV with ^{their} support from LLL and
LASL ~~has~~ continuously object to any change.

Our efforts to show the inadequacy of the
guidelines in light of 1970 ^{concerns for} ~~radiation~~ ~~protection~~

opponents of the public, are met with the claim

that the ^{criteria} ~~standards~~ used are those required in
the program. Official criteria that would be more appropriate

In our view, Testing should have been

revised at the time all test were to be conducted

underground. At about this ~~same~~ time, 1961-62, it became
evident that internal ^{potentially hazardous} ~~exposure~~ ~~was~~ ~~an~~ ~~important~~

and in some cases ^{to which the objectives of the} ~~more~~ ~~important~~ ~~than~~ ~~external~~ ~~exposure~~ ~~also~~
exposures to organs other than whole body was the limiting factor.

~~The~~ ~~criteria~~ ~~should~~ ~~have~~ ~~been~~ ~~revised~~

following the Bronkwy release of December 1970

~~Of the 1000+ following Bonheur were~~
~~only 100, the largest, about 0.5 km wide, had~~
~~at least 1000+.~~ ^{execution of} Field Operation EMERY,

of which Bonheur was a part, was suspended

for about six months as a result of the release
from this test of the highest of about 0.035 km

of unclassified report the area was a small portion
less than 1/10th, was very 1 of the 3.9 km/yr planning guide that NV and

the debris are still supporting. The next time at this

for a serious review of the interia was when AEC

was abolished and EPDA established. The 3.9 km/yr

and 10 km in 10 yr interia were reviewed and approved

by the Commissioner and the support provided in

from the same agency since the time before the TCNE then days

was at NTS

The 3.9 km/yr interia was limited at a time

whole body, Unusual
the acceptable, approximate population

0.3 Rem/week. ~~A lot is in there~~

~~was about 1.5 weeks, then, the 3.9 Rem~~ 1.5 weeks

~~was about 1.5 weeks, then, the 3.9 Rem~~ 3.9 Rem/week

FPA, NCRP guidance on exposure of individuals

exposure from external operations is 0.5 Rem/year
with both external and internal emitters,
of the U.S. population, to be left to
experience with minimum

Bayern The 1955 rate of NTS

the nature of what can be considered

what is the nature of what can be considered

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3 or 4 years of testing.

The provisions in Enclosure 1 related to long
5 Rem and 15 Rem in 30 years
Term exposures hinge on whether measures to
~~to~~ reduce exposures are available. ~~the~~ Our
concerns are defused when we examine the
current "NV Emergency Preparedness Plan" dated
February 1975. This contains the text related
emergency plan for the case where radioactivity
is released off site. The plan ^{is stated to provide guidance and direction to} contains assignments
of responsibility and telephone ^{numbers} ~~contacts~~. There is
^{no} guidance on ^{will be made on} judgement, ^{whether} ~~whether~~ is not protective
action should be initiated. This leaves ^{as not done} ~~has too~~
much uncertainty in what may be done, and there is no
way to know whether the 5 and 15 Rem values are

not in proper proportion.

Another critical point of disagreement is whether
the 5 and 15 Rem in 30 year values include post
exposure. We argue this is required by FPC and
NCRP and ^{that} post exposure off NTS are too large
to ignore. Enclosure 12 and 13 show what
these exposures have been. ~~Office population~~
~~locations~~ ^{Office population 12 covers} residents in nearby locations have been
exposed to levels as high as 15 Rem and
the 6,300 residents of Saint George, Utah received
about 4 Rem external exposure. ^{and Hurricane} The total
exposure, external plus internal, is largely unknown.
In contrast, the residents of Las Vegas through the location
where the guidance in Enclosure 1 is 170 Rem/yr

have received only about 0.2 Rem from all
~~port tests. ^{There is no definite indication of} ~~port tests. ^{with the H.V. and I.V. ~~port tests~~}~~
~~large population of people, ^{are to be, ~~which~~} ~~large population of people, ~~in ~~the~~~~~~~~~~

A final point of concern is ^{establishment} ~~the~~ of a single criterion
for all tests in a series. This issue is treated
in the concluding portion of Enclosure 11. I believe
there is an urgent need to immediately update the guidance
^{radical}
used by NV relative to ^{radical} safety of residents adjacent to NTS.
After a period of inactivity, testing will resume at NTS
probably this month. We are seeking your

Recommendations of FRC, NCRP, and ICRP ~~and~~
is this guideline ~~it~~ ^{philosophy}
recently applied is actually in conflict with the
~~and~~ ~~recommendation on~~ ^{recommendation on} rotation protection put forth

by these bodies. In any case, the support for ~~continued~~
~~may significantly~~ ^{went into}
use of the 3.9 Rem/yr guideline ended when AEC ~~was~~
being superseded. More certainly it ended when AEC was abolished.
~~abolished~~. Continued use of this ~~criteria~~ ^{criteria} would
require a new round of review and concurrence at
a level ~~high~~ ^{its} equivalent to that obtained for use
of with atmospheric testing.

ERDA Manual 0524, Part 051 entitled "Applicability,"
~~contains~~ contains a provision allowing for exceptions to
the basic standards for uncontrolled areas. Such
exceptions may be developed in coordination with the
Director, Division of Environmental Safety, in accordance

Part of ERDA Manual 0524
with 031(b) which gives the Director OS the
authority to approve or disapprove each proposed
exception, as may be set forth in other Manual
chapters. As of this time it is my position that the
~~current~~ guidance in the supplement to the FIS
was not developed in coordination with OS, no
exception has been approved, and no manual chapter
has been developed. The time for development of suitable
guidance is long past.

According to Part 033 b., ~~Managers of Field~~ managers
of field offices are to request and justify specific
exceptions for planned or anticipated deviations
from the requirements of ERDA Manual 0524. Since
this matter ~~is~~ relates in a direct way ~~to~~ to

the safety of the population living in the nearby
offsite area around NTS, I urge that ~~the~~ the
^{problem}
~~matter~~ of developing a radiation safety criteria be
given immediate and priority attention. Since
^{single paragraph}
the ~~statement of offsite criteria~~ in the ETS supplement
is apparently the only material explaining or justifying
the offsite criteria, it is my view that this is
unsatisfactory and I have informed General Batz.
~~We will be willing to work~~ we will cooperate with
you and your staff in ^{working on} ~~assisting you development of~~
suitable criteria but believe NV should provide the
leadership in ^{material supporting an} ~~any~~ development of any ^{on} ~~specifications~~ to
current radiation standards.