

CHAPTER 3

AN ANNOTATED COPY OF 24 CFR PART 51

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DEPARTMENT OF HOUSING AND  
URBAN DEVELOPMENT

Office of the Secretary

24 CFR Part 51

Environmental Criteria and Standards

Subpart A - General Provisions

EFFECTIVE DATE: August 13, 1979

SOURCE: Federal Register: July 12,  
1979; pp 40860-40862

51.1 Purpose

51.2 Authority

51.3 Responsibilities

51.4 Program coverage

51.5 Coordination with environmental  
clearance requirements

51.6 Reserved

Authority: Section 7(d). Department  
of Housing and Urban Development Act  
(42 U.S.C. 3535 (d)).

51.1 PURPOSE

The Department of Housing and  
Urban Development is providing program  
Assistant Secretaries and  
administrators and field offices with  
environmental standards, criteria and  
guidelines for determining project  
acceptability and necessary mitigating  
measures to insure that activities  
assisted by the Department achieve the  
goal of a suitable living environment.

51.2 AUTHORITY

This Part implements the

Department's responsibilities under the following statutes:

- (a) The National Housing Act of 1934 (P.L. 73-479 ) which was

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enacted "to encourage improvements in housing standards and conditions, to provide a system of mutual mortgage insurance, and for other purposes," thus providing the basis for HUD's Minimum Property Standards (MPS) which have evolved as required by legislation over the past 44 years.

- (b) The Housing Act of 1949 (P.L. 81-171) which sets forth the national goal of "a decent home and a suitable living environment for every American family," affirmed by the Housing and Urban Development Act of 1968 (P.L. 90-448).
- (c) The Department of Housing and Urban Development Act of 1965 (P.L. 89-174) which provides that the Secretary may make such rules and regulations as may be necessary to carry out functions, powers, and duties, and sets forth, as a matter of national purpose, the sound development of the Nation's communities and metropolitan areas.
- (d) The National Environmental Policy Act of 1969 (P.L. 91-190) which directs Federal agencies to develop procedures to carry out the purposes of the Act.
- (e) Intergovernmental Cooperation Act of 1968 (P.L. 90-577) which, under Title IV, directs that Federal programs and projects serve the objectives of appropriate

land use for housing,  
commercial, industrial,  
governmental, institutional,

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and other purposes to achieve  
sound and orderly development  
of all areas, both urban and  
rural.

### 51.3 RESPONSIBILITIES

- (a) Assistant Secretary for  
Community Planning and  
Development. The Assistant  
Secretary for Community  
Planning and Development  
shall be responsible for  
administering environmental  
regulations, and shall  
provide oversight,  
interpretation and guidance, and  
shall update the regulations  
as required. The Assistant  
Secretary shall also maintain  
liaison with other Federal  
agencies on matters of  
environmental policy  
implementation.
- (b) Assistant Secretary for  
Policy Development and  
Research. The Assistant  
Secretary for Policy  
Development and Research shall  
undertake research and  
demonstration studies  
necessary for the technical  
development of environmental  
standards, criteria, and  
implementing techniques as a  
basis for the development and  
implementation of  
environmental regulations. The  
Assistant Secretary shall  
also maintain liaison with  
Federal agencies on related  
technical matters.
- (c) Other Assistant Secretaries,  
Administrators, and the  
General Counsel. Other  
Assistant Secretaries,  
Administrators, and the

General Counsel shall:

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- (1) Incorporate adopted environmental regulations by reference into program regulations, guidance documents, and administrative forms and procedures;
- (2) Evaluate the effects of, and compliance with Departmental environmental regulations policy and report significant issues and problems to the Assistant Secretary for Community Planning and Development; and
- (3) Identify program areas under their jurisdiction in which additional environmental regulations are needed, and refer them to the Assistant Secretary for Community Planning and Development.

(d) Regional Administrators, Area Office Managers, Service Office Supervisors. Regional Administrators, Area Office Managers, and Service Office Supervisors shall assure that adopted environmental regulations are implemented in relation to program decisions and recommendations. They shall also monitor projects to assure that mitigation measures are implemented.

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51.4 PROGRAM COVERAGE

Environmental standards shall apply to all HUD actions except where special provisions and exemptions are contained in each Subpart.

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51.5 COORDINATION WITH ENVIRONMENTAL  
CLEARANCE REQUIREMENTS

Environmental standards shall be implemented prior to commitment in the decision-making process and, where environmental clearances are required, the decision points shall be identical. Compliance with HUD environmental standards shall be addressed in the environmental clearance process.

51.6 (RESERVED)

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Subpart B - Noise Abatement  
and Control

EFFECTIVE DATE: August 13, 1979

SOURCE: Federal Register: July 12,  
1979; pp 40862-40866

- 51.100 Purpose and Authority
- 51.101 General policy
- 51.102 Responsibilities
- 51.103 Criteria and standards
- 51.104 Special requirements
- 51.105 Exceptions
- 51.106 Implementation

Appendix I to Subpart B

51.100 PURPOSE AND AUTHORITY

- (a) Purpose. The Department of Housing and Urban Development finds that noise is a major source of environmental pollution which represents a threat to the serenity and quality of life in population centers and that noise exposure may be a cause of

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adverse physiological and psychological effects as well as economic losses.

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It is the purpose of this Subpart to:

- (1) Call attention to the threat of noise pollution;
- (2) Encourage the control of noise at its source in cooperation with other Federal departments and agencies;

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- (3) Encourage land use patterns for housing and other noise sensitive urban needs that will provide a suitable separation between them and major noise sources;
  - (4) Generally prohibit HUD support for new construction of noise sensitive uses on sites having unacceptable noise exposure;
  - (5) Provide policy on the use of structural and other noise attenuation measures where needed; and
  - (6) Provide policy to guide implementation of various HUD programs.
- (b) Authority. Specific authorities for noise abatement and control are contained in:
- (1) The Noise Control Act of 1972 (P.L. 92-574) which directs Federal agencies to administer their programs in ways which reduce noise pollution.

- (2) The Quiet Communities Act of 1978 (P.L. 95-609) which amended P.L. 92-574.
- (3) The General Services Administration, Federal Management Circular 75-2: Compatible Land Uses at Federal Airfields prescribes the Executive Branch's general policy with respect to achieving

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compatible land uses on either public or privately owned property at or in the vicinity of Federal airfields.

- (4) Section 1113 of the Housing and Urban Development Act of 1965 (P.L. 89-117) directs the Secretary " \* \* \* to determine feasible methods of reducing the economic loss and hardships suffered by homeowners as a result of the depreciation in the value of their properties following the construction of airports in the vicinity of their homes, including a study of feasible methods of insulating such homes from the noise of aircraft."

51.101 GENERAL POLICY

- (a) It is HUD's general policy to provide minimum national standards applicable to HUD programs to protect citizens against excessive noise in their communities and places of residence.

- (1) Comprehensive planning assistance. HUD requires that grantees give adequate consideration to noise exposures and sources of noise exposures and sources of noise as an integral part of the urban environment in HUD assisted comprehensive planning, as follows:

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- (i) Particular emphasis shall be placed on the importance of compatible land use planning in relation to airports, highways and other sources of high noise.
  - (ii) Applicants shall take into consideration HUD environmental standards impacting the use of land as required in 24 CFR Part 600.
  - (iii) Environmental studies, including noise assessments, are allowable costs.
- (2) Community Development Block Grants. Recipients of community development block grants under the Housing and Community Development Act of 1974 (P.L. 93-383), as amended by the Housing and Community Development Act of 1977 (P.L. 95-128), must take into consideration the noise

criteria and standards  
in the environmental  
review process and  
consider ameliorative  
actions when noise  
sensitive land  
development is proposed in  
noise exposed areas.  
Grant recipients shall  
address deviations from

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the standards in their  
environmental reviews as  
required in 24 CFR Part  
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Where CDBG activities  
are planned in a noisy  
area, and HUD assistance  
is contemplated later  
for housing and/or other  
noise sensitive  
activities, the CDBG  
grantee risks denial of  
the HUD assistance  
unless the HUD standards  
are met. Environmental  
studies, including noise  
assessments, are  
allowable costs.

- (3) HUD support for new  
construction. HUD  
assistance for the  
construction of new noise  
sensitive uses is  
prohibited generally for  
projects with Unacceptable  
noise exposures and  
is discouraged for  
projects with Normally  
Unacceptable noise  
exposure. (Standards of  
acceptability are  
contained in section  
51.103(c).) This policy  
applies to all HUD  
programs providing  
assistance, subsidy or  
insurance for housing,  
college housing, mobile  
home parks, nursing  
homes, hospitals, and

all programs providing assistance or insurance for land development, new communities, redevelopment or any other provision of facilities and services which are directed to making land available

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for housing or noise sensitive development. The policy does not apply to research demonstration projects which do not result in new construction or reconstruction, flood insurance, interstate land sales registration, or any action or emergency assistance under disaster assistance programs which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance provided that has the effect of restoring facilities substantially as they existed prior to the disaster.

- (4) HUD support for existing construction. Noise exposure by itself will not result in the denial of HUD support for the resale and purchase of otherwise acceptable existing buildings. However, environmental noise is a marketability factor which HUD will consider in determining the amount of insurance or other assistance that may be given.

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| (5) | HUD support of modernization and rehabilitation. For modernization projects located in all noise exposed areas, HUD shall encourage noise attenuation features in alterations. For major | *<br>* GRAPHICS *<br>* MATERIAL *<br>* IN *<br>* ORIGINAL *<br>* DOCUMENT *<br>* OMITTED *<br>* *<br>***** |
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or substantial rehabilitation projects in the Normally Unacceptable and Unacceptable noise zones, HUD actively shall seek to have project sponsors incorporate noise attenuation features, given the extent and nature of the rehabilitation being undertaken and the level of exterior noise exposure. In Unacceptable noise zones, HUD shall strongly encourage conversion of noise exposed sites to land uses compatible with the high noise levels.

- (6) Research, guidance and publications. HUD shall maintain a continuing program designed to provide new knowledge of noise abatement and control to public and private bodies, to develop improved methods for anticipating noise encroachment, to develop noise abatement measures through land use and building construction practices, and to foster better understanding of the consequences of noise. It shall be HUD's policy to issue guidance documents

periodically to assist  
HUD personnel in  
assigning an  
acceptability category to  
projects in accordance  
with noise exposure  
standards, in evaluating  
noise attenuation

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measures, and in  
advising local agencies  
about noise abatement  
strategies. The guidance  
documents shall be  
updated periodically in  
accordance with advances  
in the state-of-the-art.

- (7) Construction equipment  
building equipment and  
appliances. HUD shall  
encourage the use of  
quieter construction  
equipment and methods in  
population centers, the  
use of quieter equipment  
and appliances in  
buildings, and the use  
of appropriate noise  
abatement techniques in  
the design of  
residential structures  
with potential noise  
problems.
  
- (8) Exterior noise goals.  
It is a HUD goal that  
exterior noise levels do  
not exceed a day-night  
average sound level of  
55 decibels. This level  
is recommended by the  
Environmental Protection  
Agency as a goal for  
outdoors in residential  
areas. The levels  
recommended by EPA are  
Mt standards and do not  
take into account cost  
or feasibility. For the  
purposes of this regulation  
and to meet other  
program objectives

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sites with a day-night average sound level of 65 and below are acceptable and are allowable (see Standards in section 51.103(c)).

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- (9) Interior noise goals. It is a HUD goal that the interior auditory environment shall not exceed a day-night average sound level of 45 decibels. Attenuation measures to meet these interior goals shall be employed where feasible. Emphasis shall be given to noise sensitive interior spaces such as bedrooms. Minimum attenuation requirements are prescribed in section 51.104(a).
- (10) Acoustical privacy in multifamily buildings. HUD shall require the use of building design and acoustical treatment to afford acoustical privacy in multifamily buildings pursuant to requirements of the minimum Property Standards.

51.102 RESPONSIBILITIES

- (a) Authority to approve projects.
  - (1) Decisions on proposed projects with acceptable noise exposures shall be delegated to the program personnel within field offices, including projects where increased noise levels are considered acceptable because of non-acoustic benefits under section

51.105(a). Field office program personnel may also approve projects in normally unacceptable noise exposed areas

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where adequate sound attenuation is provided and where the project does not require an Environmental Impact Statement under section 51.104(b).

- (2) Other approvals in normally unacceptable noise exposed areas require the concurrence of the Regional Administrator.
  - (3) Requests for approvals of projects or portions of projects with unacceptable noise exposures shall be referred through the Regional Office to the Assistant Secretary for Community Planning and Development for approval pursuant to section 51.104(b).
  - (4) In cases where the Regional Administrator determines that an important precedent or issue is involved, such cases shall be referred with recommendations to the Assistant Secretary for Community Planning and Development.
- (b) Surveillance of noise problem areas. Appropriate field staff shall maintain surveillance of potential noise problem areas and advise local officials, developers, and planning groups of the unacceptability

of sites because of noise exposure at the earliest possible time in the decision process. Every

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attempt shall be made to insure that applicants' site choices are consistent with the policy and standards contained herein.

- (c) Notice to applicants. At the earliest possible stage, HUD program administrators shall:
- (1) Determine the suitability of the acoustical environment of proposed projects;
  - (2) Notify applicants of any adverse or questionable situations; and
  - (3) Assure that prospective applicants are apprised of the standards contained herein so that future site choices will be consistent with these standards.
- (d) Technical assistance. Technical assistance in the measurement, estimation, interpretation, or prediction of noise exposure is available from the Office of Community Planning and Development and the Office of Policy Development and Research. Field office questions shall be forwarded through the Regional Office to the Assistant Secretary for Community Planning and Development or his designee.
- (e) Interdepartmental coordination. Regional Administrators shall foster appropriate coordination between field offices and

other departments and agencies, particularly the Environmental Protection

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Agency, the Department of Transportation, Department of Defense representatives, and the Veterans Administration. HUD staff shall utilize the acceptability standards in commenting on the prospective impacts of transportation facilities and other noise generators in the Environmental Impact Statement review process.

51.103 CRITERIA AND STANDARDS

These standards apply to all programs as indicated in section 51.101.

- (a) Measure of external noise environments. The magnitude of the external noise environment at a site is determined by the value of the day-night average sound level produced as the result of the accumulation of noise from all sources contributing to the external noise environment at the site. Day-night average sound level, abbreviated as DNL and symbolized as Ldn, is the 24-hour average sound level, in decibels, obtained after addition of 10 decibels to sound levels in the night from 10 p.m. to 7 a.m. Mathematical expressions for average sound level and day-night average sound level are stated in the Appendix I to this Subpart.
- (b) Loud impulsive sounds. On an interim basis, when loud impulsive sounds, such as explosions or sonic booms, are experienced at a site,

the day-night average sound level produced by the loud impulsive sounds alone shall

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have 8 decibels added to it in assessing the acceptability of the site (see Appendix). Alternatively, the C-weighted day-night average sound level (Lcdn) may be used without the 8 decibel addition, as indicated in section 51.106(a)(3).

Methods for assessing the contribution of loud impulsive sounds to day-night average sound level at a site and mathematical expressions for determining whether a sound is classed as "loud impulsive" are provided in the Appendix.

- (c) Exterior standards. The degree of acceptability of the noise environment at a site is determined by the sound levels external to buildings or other facilities containing noise sensitive uses. The standards shall usually apply at a location 2 meters (6.5 feet) from the building housing noise sensitive activities in the direction of the predominant noise source. Where the building location is undetermined, the standards shall apply 2 meters (6.5 feet) from the building setback line nearest to the predominant noise source. The standards shall also apply at other locations where it is determined that quiet outdoor space is required in an area ancillary to the principal use on the site.

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The noise environment inside a building is considered

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acceptable if (a) the noise environment external to the building complies with these standards, and (b) the building is constructed in a manner common to the area or, if of uncommon construction, has at least the equivalent noise attenuation characteristics.

Site Acceptability Standards

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Day-Night average sound level (in decibels)	Special approvals and requirements
Acceptable..... Not exceeding 65 dB(1).....	None
Normally.....Above 65 dB but not Unacceptable exceeding 75 dB	Special Approvals (2) Environmental Review (3) Attenuation (4)
Unacceptable.....Above 75 dB.....	Special Approvals (2) Environmental Review (3) Attenuation (5)

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Notes:

- (1) Acceptable threshold may be shifted to 70 dB in special circumstances pursuant to section 51.105(a).
- (2) See section 51.104(b) for requirements.
- (3) See section 51.104(b) for requirements.
- (4) 5 dB additional attenuation required for sites above 65 dB but not exceeding 70 dB and 10 dB additional attenuation required for sites above 70 dB but not exceeding 75 dB. (See section 51.104(a).)
- (5) Attenuation measures to be submitted to the Assistant Secretary for CPD for approval on a case-by-case basis.

51.104 SPECIAL REQUIREMENTS

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(a) Noise attenuation. Noise attenuation measures are those required in addition to attenuation provided by buildings as commonly constructed in the area, and requiring open windows for ventilation. Measures that reduce external noise at a site shall be used wherever practicable in preference to the incorporation of additional noise attenuation in buildings. Building designs and construction techniques that provide more noise attenuation than typical construction may be employed also to meet the noise attenuation requirements.

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(1) Normally Unacceptable noise zone. Approvals in this zone require a minimum of 5 decibels additional sound attenuation for buildings having noise-sensitive uses if the day-night average sound level is greater than 65 decibels but does not exceed 70 decibels, or a minimum of 10 decibels of additional sound attenuation if the day-night average sound level is greater than 70 decibels but does not exceed 75 decibels.

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(2) Unacceptable noise zone. Noise attenuation measures require the approval of the Assistant Secretary for Community Planning and Development. (See section 51.104(b)(2).)

(b) Special Approvals and Environmental Review Requirements. Environmental clearances shall be conducted pursuant to the requirements of HUD's Departmental Policies, Responsibilities and Procedures for Protection and Enhancement of Environmental Quality (38 FR 19182 as amended) or other environmental regulations which may be issued by the Department. \*\*\*\*\*  
The Special Clearance and \* \* \*  
Environmental Impact \* GRAPHICS MATERIAL \*  
Statement (EIS) threshold \* IN ORIGINAL \*  
requirements are hereby \* DOCUMENT OMITTED \*  
modified for all projects \* \* \*  
proposed in the Normally \*\*\*\*\*  
Unacceptable and Unacceptable  
noise exposure zones as  
follows:

(1) Normally Unacceptable noise zone.

(i) All projects located in the Normally Unacceptable Noise Zone require a Special Environmental Clearance except an EIS is required for a proposed project located in a largely undeveloped area, or where the HUD action is likely to encourage the establishment of incompatible land use in this noise zone.

(ii) When an EIS is required, the



Administrator to the Assistant Secretary for Community Planning and Development for approval. The Assistant Secretary may waive the EIS requirement in cases where noise is the only environmental issue and no outdoor sensitive activity will take place on the site. In such cases, a Special Environmental Clearance is required.

51.105 EXCEPTIONS

- (a) Flexibility for non-acoustic benefits. Where it is determined that program objectives cannot be achieved on sites meeting the acceptability standard of 65 decibels, the Acceptable Zone may be shifted to Ldn 70 on a case-by-case basis if all the following conditions are satisfied:

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- (1) The project does not require an Environmental Impact Statement under provisions of section 104(b)(1) and noise is the only environmental issue.
- (2) The project has received a Special Environmental Clearance and has received the concurrence of the Environmental Clearance Officer.
- (3) The project meets other program goals to provide housing in proximity to employment, public facilities and transportation.

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- (4) The project is in

conformance with local goals and maintains the character of the neighborhood.

- (5) The project sponsor has set forth reasons acceptable to HUD: as to why the noise attenuation measures that would normally be required for new construction in the Ldn 65 to Ldn 70 zone cannot be met.
- (6) Other sites which are not exposed to noise above Ldn 65 and which meet program objectives are generally not available.

The above factors shall be documented and made part of the project file.

51.106 IMPLEMENTATION

- (a) Use of available data. HUD field staff shall make maximum use of noise data prepared by others when such data are determined to be current and adequately projected into the future and are in terms of the following:
  - (1) Sites in the vicinity of airports. The noise environment around airports is described sometimes in terms of Noise Exposure Forecasts, abbreviated as NEF or, in the State of California, as Community Noise Equivalent Level, abbreviated as CNEL. The noise environment for sites in the

sound level data are not available may be evaluated from NEF or CNEL analyses using the following conversions to DNL:

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DNL = NEF+35

DNL = CNEL

- (2) Sites in the vicinity of highways. Highway projects receiving Federal aid are subject to noise analyses under the procedures of the Federal Highway Administration.

Where such analyses are available they may be used to assess sites subject to the requirements of this standard. The Federal Highway Administration employs two alternate sound level descriptors:

- (a) The A-weighted sound level not exceeded more than 10 percent of the time for the highway design hour traffic flow, symbolized as L10; or  
(b) the equivalent sound level for the design hour, symbolized as Leq. The day-night average sound level may be estimated from the design hour L10 or Leq values by the following relationships, provided heavy trucks do not exceed 10 percent of the total traffic flow in vehicles per 24 hours

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and the traffic flow between 10 p.m. and 7 a.m. does not exceed 15

percent of the average  
daily traffic flow in  
vehicles per 24 hours:

DNL = L10 (design  
hour) minus 3 decibels

DNL = Leq (design  
hour) decibels

Where the auto/truck mix  
and time of day  
relationships as stated in  
this Section do not  
exist, the HUD Noise  
Assessment Guidelines or  
other noise analysis  
shall be used.

- (3) Sites in the vicinity of  
installations producing  
loud impulsive sounds.  
Certain Department of  
Defense installations  
produce loud impulsive  
sounds from artillery  
firing and bombing  
practice ranges. Noise  
analyses for these  
facilities sometimes  
encompass sites that may  
be subject to the  
requirements of this  
standard. Where such  
analyses are available  
they may be used on an  
interim basis to  
establish the  
acceptability of sites under  
this standard.

The Department of  
Defense uses day-night  
average sound level  
based on C-weighted  
sound level, symbolized  
Lcdn, for the analysis

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of loud impulsive  
sounds. Where such  
analyses are provided,  
the 8 decibel addition  
specified in section

51.103(b), is not required, and the same numerical values of day-night average sound level used as an interim basis to determine site suitability for nonimpulsive sounds apply to the Lcdn.

- (4) Use of areawide acoustical data. HUD encourages the preparation and use of areawide acoustical information, such as noise contours for airports. Where such new or revised contours become available for airports (civil or military) and military installations they shall first be referred to the Regional Office (Environmental Clearance Officer) for review, evaluation and decision on appropriateness for use by HUD.

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The Regional Office shall submit revised contours to the Assistant Secretary of Community Planning and Development for review, evaluation and decision whenever the area affected is changed by 20 percent or more, or whenever it is determined that the new contours will have a significant effect on HUD programs, or whenever the contours are not provided in a methodology acceptable

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under section 51.106(a)(1) or in other cases where the Regional Office determines that Headquarters review is

warranted. For other areawide acoustical data, review is required only where existing areawide data have been changed to reflect changes in the measurement methodology or underlying noise source assumptions. Requests for determination on usage of new or revised areawide data shall include the following:

- (i) Maps showing old, if applicable, and new noise contours, along with brief description of data source and methodology.
- (ii) Impact on existing and prospective urbanized areas and on development activity.
- (iii) Impact on HUD-assisted projects currently in processing.
- (iv) Impact on future HUD program activity. Where a field office has determined that immediate approval of new areawide data is

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necessary and warranted in limited geographic areas, the request for approval should state the

circumstances warranting such approval. Actions on proposed projects shall not be undertaken while new areawide noise data are being considered for HUD use except where the proposed location is affected in the same manner under both the old and new noise data.

- (b) Site assessments. Compliance with the standards contained in section 51.103(c) shall, where necessary, be determined using noise assessment guidelines, handbooks, technical documents and procedures issued by the Department.
- (c) Variations in site noise levels. In many instances the noise environment will vary across a site, with portions of the site being in an Acceptable noise environment and other portions in a Normally Unacceptable noise environment. The standards in section 51.103(c) shall apply to the portions of a building or buildings used for residential purposes and for ancillary noise sensitive open spaces.

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- (d) Noise measurements. Where noise assessments result in a finding that the site is borderline or questionable, or is controversial, noise measurements may be performed. Where it is determined that noise

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measurements are required, such measurements will be conducted in accordance with methods and measurement criteria established by Department. Locations for noise measurements will depend on the location of noise sensitive uses that are nearest to the predominant noise source (see section 51.103(c)).

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(e) Projections of noise exposure. In addition to assessing existing exposure, future conditions should be projected. To the extent possible, noise exposure shall be projected to be representative of conditions that are expected to exist at a time at least 10 years beyond the date of the project or action under review.

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(f) Reduction of site noise by use of berms and/or barriers. If it is determined by adequate analysis that a berm and/or barrier will reduce noise at a housing site, and if the barrier is existing or there are assurances that it will be in place prior to occupancy, the environmental noise analysis for the site may reflect the benefits afforded by the berm and/or barrier.

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In the environmental review process under section 51.104(b), the location, height and design of the berm and/or barrier shall be evaluated to determine its effectiveness, and impact on design and aesthetic quality, circulation and other environmental factors.

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APPENDIX I TO SUBPART B--definition of  
acoustical quantities

1. Sound level. The quantity in decibels measured with an instrument satisfying requirements of American National Standard Specification for Type 1 Sound Level Meters S1.4-1971. Fast time-averaging and A-frequency weighting are to be used, unless others are specified. The sound level meter with the A-weighting is progressively less sensitive to sounds of frequency below 1,000 hertz (cycles per second), somewhat as is the ear. With fast time averaging the sound level meter responds particularly to recent sounds almost as quickly as does the ear in judging the loudness of a sound.
  
2. Average Sound Level. Average sound level, in decibels, is the level of the mean-square A-weighted sound pressure during the stated time period, with reference to the square of the standard reference sound pressure of 20 micropascals.

Day-night average sound level, abbreviated as DNL, and symbolized mathematically as  $L_{dn}$  is defined as:

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Time (t) is in seconds, so the limits shown in hours and minutes are actually interpreted in seconds.  $L_A(t)$  is the time varying value of A-weighted sound level, the quantity in decibels measured by an instrument satisfying requirements of American

National Standard Specification for  
Type 1 Sound Level Meters S1.4-1971.

3. Loud Impulsive Sounds. When loud impulsive sounds such as sonic booms or explosions are anticipated contributors to the noise environment at a site, the contribution to day-night average sound level produced by the loud impulsive sounds shall have 8 decibels added to it in assessing the acceptability of a site.

A loud impulsive sound is defined for the purpose of this regulation as one for which:

- (i) The sound is definable as a discrete event wherein the sound level increases to a maximum and then decreases in a total time interval of approximately one second or less to the ambient background level that exists without the sound; and
- (ii) The maximum sound level (obtained with slow averaging time and A-weighting of a Type 1 sound level meter whose characteristics comply with ANSI S1.4-1971) exceeds the sound level prior to the onset of the event by at least 6 decibels; and
- (iii) The maximum sound level obtained with fast averaging time of a sound level meter exceeds the maximum value obtained with slow averaging time by at least 4 decibels.

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Subpart C

Siting of HUD-Assisted Projects  
Near Hazardous Operations Handling  
Conventional Fuels or Chemicals  
of an Explosive or Flammable Nature

EFFECTIVE DATE: April 2, 1984

SOURCE: Federal Register: February 10, 1984; pp. 5100-5108; March 20, 1984, p. 10253; March 29, 1984, p. 12214

Section

51.200 Purpose

51.201 Definitions

51.202 Approval of HUD-Assisted  
Projects

51.203 Safety Standards

51.204 HUD-Assisted Hazardous  
Facilities

51.205 Mitigating Measures

51.206 Implementation

51.207 Amendments to Appendix 1  
to this Subpart

51.208 Reservation of Administrative  
and Legal Rights

Appendix I to Subpart C

Appendix II to Subpart C

Authority: Sec. 2 Housing Act of 1949 (42 U.S.C. 1441); Sec. 7(d) Department of Housing and Urban Development Act (42 U.S.C. 3535(d)); Sec. 2, Housing and Urban Development Act of 1969 (42 U.S.C. 1441(a)).

51.200 PURPOSE

The Department of Housing and Urban Development finds that it is necessary to establish standards for the location of proposed HUD-assisted

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projects near hazardous operations handling petroleum products or chemicals of an explosive or fireprone nature in order to minimize the

possibility of loss of life and substantial property loss from such hazards.

The purpose of this subpart is to:

- (a) Establish safety standards which can be used as a basis for calculating acceptable separation distances (ASD) for HUD-assisted projects from specific, stationary, hazardous operations which store, handle, or process hazardous substances;
- (b) Alert those responsible for the siting of HUD-assisted projects to the inherent potential dangers when such projects are located in the vicinity of such hazardous operations;
- (c) Provide guidance for identifying those hazardous operations which are most prevalent;
- (d) Provide the technical guidance required to evaluate the degree of danger anticipated from explosion and thermal radiation (fire); and
- (e) Provide technical guidance required to determine acceptable separation distances from such hazards.

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#### 51.201 DEFINITIONS

Acceptable Separation Distance (ASD)  
- means the distance beyond explosion or combustion of a hazard is not likely to cause structures or individuals to be subjected to blast overpressure or thermal radiation flux levels in excess of the safety standards in section 51.203. The ASD

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is determined by applying the safety standards established by this subpart to the guidance set forth in HUD Guidebook, "Urban Development Siting With Respect to Hazardous Commercial/

Industrial Facilities."

Blast Overpressure - means the pressure, in pounds per square inch, in excess of normal atmospheric pressure on the surrounding medium caused by an explosion.

Danger Zone - means the land area circumscribed by the radius which delineates the ASD of a given hazard. Department - means the Department of Housing and Urban Development (HUD).

Hazard - means any stationary container which stores, handles or processes hazardous substances of an explosive or fire prone nature. The term "hazard" does not include pipelines for the transmission of hazardous substances, if such pipelines are located underground or comply with applicable Federal, State and local safety standards. Also excepted are: (1) containers with a capacity of 100 gallons or less when they contain common liquid industrial fuels, such as gasoline, fuel oil, kerosene and crude oil since they generally would pose no danger in terms of thermal radiation or blast overpressure to a project; and (2) facilities which are shielded from a proposed HUD-assisted project by the topography, because these topographic features effectively provide a mitigating measure already in place.

Hazardous Substances - means petroleum products (petrochemicals) and chemicals that can produce blast overpressure or thermal radiation levels in excess of the standards set forth in section 51.203. A specific list of hazardous substances is found in Appendix 1 to this Subpart.

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HUD-Assisted Project - the development, construction, rehabilitation, modernization or conversion with HUD subsidy, grant assistance, loan, loan guarantee, or mortgage insurance, of any project

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which is intended for residential, institutional, recreational, commercial or industrial use. For purposes of this Subpart the terms "rehabilitation" and "modernization" refer only to such repairs and renovation of a building or buildings as will result in an increased number of people being exposed to hazardous operations by increasing residential densities, converting the type of use of a building to habitation, or making a vacant building habitable.

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Secretary - means the Secretary of Housing and Urban Development.

Thermal Radiation Level - means the emission and propagation of heat energy through space or a material medium, expressed in BTU per square foot per hour (BTU/sq. ft. hr.)

51.202 APPROVAL OF HUD-ASSISTED PROJECTS

(a) It is HUD's policy that projects receiving HUD assistance will be located in a safe and healthful environment. The Department will not approve an application for assistance for a proposed project located at less than the acceptable separation distance from a hazard, as defined in section 51.201, unless appropriate mitigating measures, as defined in section 51.205, are implemented, or unless mitigating measures are already in place.

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(b) In the case of all applications for proposed HUD-assisted projects, the Department shall evaluate projected development

plans in the vicinity of these projects to determine whether there are plans to install a hazardous operation in close proximity to the proposed project. If the evaluation shows that such a plan exists, the

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Department shall not approve assistance for the project unless the Department obtains satisfactory assurances that adequate mitigating measures will be taken when the hazardous operation is installed.

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51.203 SAFETY STANDARDS

The following standards shall be used in determining the acceptable separation distance of a proposed HUD-assisted project from a hazard:

- (a) Thermal Radiation Safety Standard. Projects shall be located so that:
  - (1) The allowable thermal radiation flux level at the building shall not exceed 10,000 BTU/sq. ft. per hr.;
  - (2) The allowable thermal radiation flux level for outdoor, unprotected facilities or areas of congregation shall not exceed 450 BTU/sq. ft. per hour.
- (b) Blast Overpressure Safety Standard. Projects shall be located so that the maximum allowable blast overpressure at both buildings and outdoor, unprotected facilities or areas shall not exceed 0.5 psi.
- (c) If a hazardous substance constitutes both a thermal radiation and blast overpressure hazard, the ASD for each hazard

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shall be calculated, and the larger of the two ASDs shall be used to determine compliance with this Subpart.

51.204 HUD-ASSISTED HAZARDOUS FACILITIES

In reviewing applications for proposed HUD-assisted projects involving the installation of hazardous facilities, the Department shall ensure that such hazardous facilities are located at an acceptable separation distance from residences and from any other facility or area where people may congregate or be present. The mitigating measures listed in section 51.205 may be taken into account in determining compliance with this section.

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51.205 MITIGATING MEASURES

Application of the standards for determining an Acceptable Separation Distance (ASD) for a HUD-assisted project from a potential hazard of an explosion or fire prone nature is predicated on level topography with no Intervening object(s) between the hazard and the project. Application of the standards can be eliminated or modified if:

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- a. The nature of the topography shields the proposed project from the hazard.
- b. An existing permanent fire resistant structure of adequate size and strength will shield the proposed project from the hazard.
- c. A barrier is constructed surrounding the hazard, at the site of the project, or in between the potential hazard and the proposed project.

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- d. The structure and outdoor areas used by people are designed to withstand blast overpressure and thermal radiation anticipated from the potential hazard (e.g., the project is of masonry and steel or reinforced concrete and steel construction).

51.206 IMPLEMENTATION

This Subpart shall be implemented for each proposed HUD-assisted project by the Departmental official responsible for Departmental review of the project. The implementation procedure will be part of the environmental assessment process in accordance with the procedures set forth in 24 CFR Part 50 and 24 CFR Part 58. In the case of HUD-assisted projects for which the Department's Project Selection Criteria at 24 CFR Section 200.700 et seq. are applicable, the requirements of this Subpart shall be implemented by the Departmental official responsible for determining compliance with such criteria.

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51.207 AMENDMENTS TO APPENDIX I TO THIS SUBPART

- (a) The Secretary may prescribe supplementary substances for inclusion in Appendix I to this Subpart without prior notice and public procedure. Specific notice of these supplementary substances, to include the reason for including the substances, shall be published in the Federal Register, in accordance with 5 U.S.C. 552 and 24 CFR 15.11. Such notice may incorporate these supplementary substances by reference. In addition, discussion of the basis for including these supplementary substances will be available for examination and distribution in

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the Office of Environment and Energy, Room 7152, Department of Housing and Urban Development, 451 Seventh Street, SW, Washington, DC 20410, and in each HUD Regional and local office.

- (b) The Secretary or his designee may, on a case-by-case basis,

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when circumstances warrant, require the application of this Subpart with respect to a substance not listed in Appendix I to this Subpart that would create thermal or overpressure effect in excess of that listed in section 51.203.

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(c) Any interested person may petition the Secretary for amendment of Appendix I to this Subpart in accordance with 24 CFR 10.20.

51.208 RESERVATION OF ADMINISTRATIVE AND LEGAL RIGHTS

Publication of these standards does not constitute a waiver of any right: (a) of HUD to disapprove a project proposal if the siting is too close to a potential hazard not covered by this Subpart, and (b) of HUD or any person or other entity to seek to abate or to collect damages occasioned by a nuisance, whether or not covered by the Subpart.

Dated February 1, 1984

Samuel R. Pierce, Jr.  
Secretary of Housing and  
Urban Development

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APPENDIX I - TO SUBPART C

Specific Hazardous Substances

The following is a list of specific petroleum products and chemicals defined to be hazardous substances under section 51.201.

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HAZARDOUS LIQUIDS

- Acetic Acid
- Acetic Anhydridge
- Acetone
- Acrylonitrile
- Amyl Acetate
- Amyl Alcohol

Benzene  
Butyl Acetate  
Butyl Acrylate  
Butyl Alcohol  
Carbon Bisulfide  
Carbon Disulfide  
Cellosolve  
Cresols  
Crude Oil (Petroleum)  
Cumene  
Cyclohexane  
No. 2 Diesel Fuel  
Ethyl Acetate  
Ethyl Acrylate  
Ethyl Alcohol  
Ethyl Benzene  
Ethyl Dichloride  
Ethyl Ether  
Gasoline  
Heptane  
Hexane  
Isobutyl Acetate  
Isobutyl Alcohol  
Isopropyl Acetate  
Isopropyl Alcohol  
Jet Fuel & Kerosene  
Methyl Alcohol  
Methyl Amyl Alcohol  
Methyl Cellosolve  
Methyl Ethyl Ketone  
Naptha  
Pentane  
Propylene Oxide

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Toluene  
Vinyl Acetate  
Xylene

#### HAZARDOUS GASES

Acetaldehyde  
Butadiene  
Butane  
Ethene  
Ethylene  
Ethylene Oxide  
Hydrogen  
Liquefied Natural Gas (LNG)  
Liquefied Petroleum Gas (LPG)  
Propane  
Propylene  
Vinyl Chloride

(Primary Source: "Urban Development Siting with respect to Hazardous Commercial/Industrial Facilities," by Rolf Jensen and Associates, Inc., April 1982)

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APPENDIX II - TO SUBPART C

Development of Standards;  
Calculation Methods

- I. Background Information Concerning The Standards:
- (a) Thermal Radiation
- (1) Introduction. Flammable products stored in above ground containers represent a definite, potential threat to human life and structures in the event of fire. The resulting fireball emits thermal radiation which is absorbed by the surroundings. Combustible structures, such as wooden houses, may be ignited by the thermal radiation being emitted. The radiation can cause severe burn, injuries and even death to exposed persons some distance away from the site of the fire.
- (2) Criteria for Acceptable Separation Distance (ASD). Wooden buildings, window drapes and trees generally ignite spontaneously when exposed for a relatively long period of time to thermal radiation levels of approximately 10,000 BTU/hr. sq. ft. It will take 15 to 20 minutes for a building to ignite

at that degree of

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thermal intensity. Since the reasonable response time for fire fighting units in urbanized areas is approximately 5 to 10 minutes, a standard of 10,000 BTU/hr. sq. ft. is considered an acceptable level of thermal radiation for buildings.

People in outdoor areas exposed to a thermal radiation flux level of approximately 1,500 BTU/sq. ft. hr will suffer intolerable pain after 15 seconds. Longer exposure causes blistering, permanent skin damage, and even death. Since it is assumed that children and the elderly could not take refuge behind walls or run away from the thermal effect of the fire within the 15 seconds before skin blistering occurs, unprotected (outdoor) areas, such as playgrounds, parks, yards, school grounds, etc., must be placed at such a distance from potential fire locations so that the radiation flux level is well below 1500 BTU/sq. ft. hr. An acceptable flux level, particularly for elderly people and children, is 450 BTU/sq. ft. hr. The skin can be exposed to this degree of thermal radiation for 3 minutes or longer with no

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serious detrimental effect. The result would be the same as a bad sunburn. Therefore, the standard for areas in which there will be exposed people, e.g. outdoor recreation areas such as playgrounds and parks, is set at 450 BTU/hr. sq. ft. Areas covered also include open space ancillary to residential structures, such as yard areas and vehicle parking areas.

- (3) Acceptable Separation Distance From a Potential Fire Hazard. This is the actual setback required for the safety of occupied buildings and their inhabitants, and people in open spaces (exposed areas) from a potential fire hazard. The specific distance required for safety from such a hazard depends upon the nature and the volume of the substance. The Technical Guidebook entitled "Urban Development Siting With Respect to Hazardous/Commercial Industrial Facilities," which supplements this regulation, contains the technical guidance required to compute Acceptable Separation Distances (ASD) for those flammable substances most often encountered.

The Acceptable Separation Distance (ASD) for people and structures from materials prone to explosion is dependent upon the resultant blast measured in pounds per square inch (psi) overpressure. It has been determined by the military and corroborated by two independent studies conducted for the Department of Housing and Urban Development that 0.5 psi is the acceptable level of blast overpressure for both buildings and occupants, because a frame structure can normally withstand that level of external exertion with no serious structural damage, and it is unlikely that human beings inside the building would normally suffer any serious injury. Using this as the safety standard for blast overpressure, nomographs have been developed from which an ASD can be determined for a given quantity of hazardous substance. These nomographs are contained in the handbook with detailed instructions on their use.

(c) Hazard evaluation

The Acceptable Separation Distances for buildings, which are determined for thermal radiation and blast overpressure, delineate separate identifiable danger zones for each potential accident source. For some materials the fire danger zone will have the greatest radius and cover the largest area, while for others the

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explosion danger zone will be the greatest. For example,

conventional petroleum fuel products stored in unpressurized tanks do not emit blast overpressure of dangerous levels when ignited. In most cases, hazardous substances will be stored in pressurized containers. The resulting blast overpressure will be experienced at a greater distance than the resulting thermal radiation for the standards set in section 51.203. In any event the hazard requiring the greatest separation distance will prevail in determining the location of HUD-assisted projects.

The standards developed for the protection of people and property are given in the following table.

	THERMAL RADIATION	BLAST OVERPRESSURE
Amount of acceptable exposure allowed for building structures	10,000 BTU/sq. ft.-hr	0.5 psi
Amount of acceptable exposure allowed for people in open areas	450 BTU/sq. ft.-hr	0.5 psi

Problem Example:

The following example is given as a guide to assist in understanding how the procedures are used to determine an acceptable separation distance. The technical data are found in the HUD Guidebook. Liquid propane is used in the example since it is both an explosion and a fire hazard.

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In this hypothetical case a proposed housing project is to be located 850 feet from a 30,000 gallon liquid propane (LPG) tank. The objective is to determine the acceptable separation distance from the LPG

tank. Since propane is both explosive and fire prone it will be necessary to determine the ASD for both explosion and for fire. The greatest of the two will govern. There is no dike around the tank in this example.

Nomographs from the technical Guidebook have been reproduced to facilitate the solving of the problem.

ASD For Explosion:

Use Figure 1 to determine the acceptable separation distance for explosion.

The graph depicted on Figure 1 is predicated on a blast overpressure of 0.5 psi.

The ASD in feet can be determined by applying the quantity of the hazard (in gallons) to the graph.

In this case locate the 30,000 gallon point on the horizontal axis and draw a vertical line from that point to the intersection with the straight line curve. Then draw a horizontal line from the point where the lines cross to the left vertical axis where the ACCEPTABLE SEPARATION DISTANCE of 660 feet is found.

Therefore the ASD for explosion is 660 feet.

Since the proposed project site is located 850 feet from the tank it is located at a safe distance with regards to blast overpressure.

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ACCEPTABLE SEPARATION DISTANCE  
BLAST OVERPRESSURE  
(NO BLAST BARRIERS)  
HAZARDOUS GAS CONTAINER

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axis where the ACCEPTABLE SEPARATION DISTANCES of 240 feet for buildings and 1150 feet for exposure to people is found.

Based on this the proposed project site is located at a safe distance from a potential fire ball. However, exposed playgrounds or other exposed areas of congregation must be at least 1150 feet from the tank, or be appropriately shielded from a potential fireball.

(Source: HUD Handbook, "Urban Development Siting With Respect to Hazardous Commercial/Industrial Facilities.")

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FIRE WIDTH - UNCONFINED SPILL  
HAZARDOUS GAS CONTAINER  
NOT DIKED

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Figure 2



- 51.303 General Policy
- 51.304 Responsibilities
- 51.305 Implementation

Authority: Section 2 of the Housing Act of 1949 as amended, 42 U.S.C 1441, affirmed by Section 2 of the Housing and Urban Development Act of 1969, P.L. No. 90-448; Section 7(d) of the Department of Housing and Urban Development Act of 1965, 42 U.S.C. 3535(d); Office of Management and Budget, Federal Management Circular 75-2: Compatible Land Uses At Federal Airfields.

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51.300 PURPOSE

- (a) The Department of Housing and Urban Development finds that HUD assisted or insured projects aid their occupants in Runway Clear Zones, Clear Zones and Accident Potential Zones are exposed to a significant risk of personal injury or property damage from aircraft accidents.
- (b) It is the purpose of this Subpart to promote compatible land uses around civil airports and military airfields by identifying suitable land uses for Runway

Clear Zones at civil airports and Clear Zones and Accident Potential Zones at military airfields and by establishing them as standards for providing HUD assistance, subsidy or insurance.

51.301 DEFINITIONS: For the purposes of this regulation, the following definitions apply:

- (a) Accident Potential Zone. An area at military airfields which is beyond the Clear Zone. The standards for the Accident Potential Zones are set out in Department of Defense Instruction 4165.57, "Air Installations

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Compatible Use Zones," November 8, 1977, 32 CFR Part 256. There are no Accident Potential Zones at civil airports.

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(b) Airport Operator. The civilian or military agency, group or individual which exercises control over the operations of the civil airport or military airfield.

(c) Civil Airport. An existing commercial service airport as designated in the National Plan of Integrated Airport Systems prepared by the Federal Aviation Administration in accordance with Section 504 of the Airport and Airway Improvement Act of 1982.

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(d) Runway Clear Zones and Clear Zones. Areas immediately beyond the ends of a runway. The standards for Runway Clear Zones for civil airports are established by FAA regulation 14 CFR Part 152. The standards for Clear Zones for military airfields are established by DOD Instruction 4165.57, 32 CFR Part 256.

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51.302 COVERAGE:

(a) These policies apply to HUD programs which provide assistance, subsidy or insurance for construction, land development, new communities, community development or redevelopment or any other provision of facilities and services which are designed to make land available for construction. When the HUD assistance, subsidy or insurance is used to make land available for construction rather than for the actual construction, the provision of the HUD assistance, subsidy or insurance shall be dependent upon whether the facility to be built is itself

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acceptable in accordance with the standards in section 51.303.

- (b) These policies apply not only to new construction but also to substantial or major modernization and rehabilitation and to any other program which significantly prolongs the physical or economic life of existing facilities or which, in the case of Accident Potential Zones:

- (1) Changes the use of the facility so that it becomes one which is no longer acceptable in accordance with the standards contained in section 51.303(b);
- (2) Significantly increases the density or number of people at the site; or
- (3) Introduces explosive, flammable or toxic materials to the area.

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- (c) Except as noted in section 51.303(a)(3), these policies do not apply to HUD programs where

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the action only involves the purchase, sale or rental of an existing property without significantly prolonging the physical or economic life of the property.

- (d) The policies do not apply to research or demonstration projects which do not result in new construction or reconstruction, to interstate land sales registration, or to any action or emergency assistance which is provided to save lives, protect property, protect public health and safety, or remove debris and wreckage.

51.303 GENERAL POLICY: It is HUD's general policy to apply standards to

prevent incompatible development around civil airports and military airfields.

- (a) HUD policy for actions in Runway Clear Zones and Clear Zones.
  - (1) HUD policy is not to provide any assistance, subsidy or insurance for projects and actions covered by this part except as stated in section 51.303 (a)(2) below.
  - (2) If a project proposed for HUD assistance, subsidy or insurance is one which will not be frequently used or occupied by people, HUD policy is to provide assistance, subsidy or insurance only when written assurances are provided to HUD by the airport operator to the effect that there are no plans to purchase the land involved with such facilities as part of a Runway Clear Zone or Clear Zone acquisition program.

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- (3) Special notification requirements for Runway Clear Zones and Clear Zones. In all cases involving HUD assistance, subsidy, or insurance for the purchase or sale of an existing property in Runway Clear Zone or Clear Zone, HUD (or the Grant Recipient under Title I of the Housing and Community Development Act of 1974, as amended, 42 U.S.C. 5301 et seq.) shall advise the buyer that the property is in a Runway Clear Zone or Clear Zone, what the implications of such a location are, and that there is a possibility that the property may, at a later date, be acquired by the airport operator. The

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buyer must sign a statement acknowledging receipt of this information.

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(b) HUD policy for actions in Accident Potential Zones at Military Airfields. HUD policy is to discourage the provision of any assistance, subsidy or insurance for projects and actions in the Accident Potential Zones. To be approved, projects must be generally consistent with the recommendations in the Land Use Compatibility Guidelines For Accident Potential Zones chart contained in DOD Instruction 4165.57, 32 CFR Part 256.

\*\*\*\*\*  
\* GRAPHICS \*  
\* MATERIAL \*  
\* IN ORIGINAL \*  
\* DOCUMENT \*  
\* OMITTED \*  
\*\*\*\*\*

51.304 RESPONSIBILITIES

(a) The following persons have the authority to approve actions in Accident Potential Zones:

(1) For Title I of the Housing and Community Development Act of 1974, as amended, 42 U.S.C. 5301 et seq: the

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certifying officer of the grant recipient as defined in Part 58 of this Title.

(2) For all other HUD programs: the program personnel having approval authority for the project.

(b) The following persons have the authority to approve actions in Runway Clear Zones and Clear Zones:

(1) For Title I of the Housing and Community Development Act of 1974, as amended, 42 U.S.C. 5301 et seq: The certifying officer of the grant recipient as defined in Part 58 of this Title.

(2) For all other HUD programs:

the Regional Administrator.

51.305 IMPLEMENTATION

(a) Projects already approved for assistance. This regulation does not apply to any project approved for assistance prior to the effective date of the regulation whether the project was actually under construction at that date or not.

\*\*\*\*\*  
\* GRAPHICS \*  
\* MATERIAL \*  
\* IN ORIGINAL \*  
\* DOCUMENT \*  
\* OMITTED \*  
\*\*\*\*\*

(b) Acceptable data on Runway Clear Zones, Clear Zones and Accident Potential Zones. The only Runway Clear Zones, Clear Zones and Accident Potential Zones which will be recognized in applying this part are those provided by the airport operators and which for civil airports are defined in accordance with FAA regulations 14 CFR Part 152 or for military airfields, DOD Instruction 4165.57, 32 CFR Part 256. All data, including changes, related to the dimensions of Runway Clear

\*\*\*\*\*  
\* GRAPHICS \*  
\* MATERIAL \*  
\* IN ORIGINAL \*  
\* DOCUMENT \*  
\* OMITTED \*  
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Zones for civil airports shall be verified with the nearest FAA Airports District Office before use by HUD.

(c) Changes in Runway Clear Zones, Clear Zones, and Accident Potential Zones. If changes in the Runway Clear Zones, Clear Zones or Accident Potential Zones are made, the field offices shall immediately adopt these revised zones for use in reviewing proposed projects.

(d) The decision to approve projects in the Runway Clear Zones, Clear Zones and Accident Potential Zones must be documented as part of the environmental assessment or, when no assessment is required, as part of the project file.

\*\*\*\*\*  
\* GRAPHICS \*  
\* MATERIAL \*  
\* IN ORIGINAL \*  
\* DOCUMENT \*  
\* OMITTED \*  
\*\*\*\*\*

Dated: December 30, 1983

Samuel R. Pierce, Jr.  
Secretary of Housing and  
Urban Development

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