

Regulations of Connecticut State Agencies

TITLE 22a. Environmental Protection

Agency

Department of Environmental Protection

Subject

Superfund Priority Score

Section

§ 22a-133f-1

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Superfund Priority Score

Sec. 22a-133f-1. Determination of the use of state funds and accounts for remedial action at hazardous waste disposal sites

(a) Definitions

“Hazardous Substance” means any substance designated pursuant to Section 101 (14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601, et seq.); any hazardous waste as defined in Section 22a-448 of the Connecticut General Statutes, as amended; or any substance which, if it were no longer intended for beneficial use, would meet the definition of “hazardous waste” contained in Section 22a-448 of the Connecticut General Statutes, as amended.

“SPL” means the State of Connecticut Superfund Priority List established by the Commissioner of Environmental Protection pursuant to subsection (b) of this section.

“SPS” means the State of Connecticut Superfund Priority Score used by the Commissioner of Environmental Protection to determine the priority of sites on the SPL as calculated pursuant to subsection (e) of this section.

(b) The Superfund Priority List

(1) The Commissioner shall establish a list of hazardous waste disposal sites deemed eligible for expenditure of state funds for remedial actions pursuant to Sec. 22a-133f of the Connecticut General Statutes. This list shall be known as the SPL.

(2) The priority for funding of remedial action at sites on the SPL shall be determined by the Superfund Priority Score (SPS) calculated pursuant to subsection (e) of this section. Except as otherwise provided in subsection (c) of this section, priority for state funded remedial actions shall be given to the sites on the SPL with the highest SPS. Whenever two sites on the SPL have the same SPS, the Commissioner shall determine the order of priority for funding based on any factors he or she deems appropriate.

(3) The SPL shall be updated whenever a site is added to or dropped from the list and whenever a site is scored or rescored pursuant to subsection (e) of this section.

(4) Continued funding of the current phase of remedial action, and the funding of successive phases of remedial action at sites at which state funded remedial action has been initiated, may be continued, at the discretion of the Commissioner, regardless of any changes in circumstances related to the site, or the relative priority of sites on the SPL caused by the addition of sites to the SPL or the rescoring of sites on the SPL.

(5) State funded remedial action at hazardous waste disposal sites which was initiated prior to the adoption of this regulation shall continue to be funded from state funds and accounts after the adoption of these regulations regardless of the relative priority of such site(s) on the SPL except as otherwise provided in subsections (c) or (d) of this section.

(c) Project phasing and project by-pass procedure

(1) Project phasing

(A) Remedial Actions undertaken pursuant to Section 22a-133e of the Connecticut General Statutes and this regulation will be done on a phased basis:

Phase 1—Remedial Investigation/Feasibility Study (RI/FS)

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Phase 2—Remedial Design (RD)

Phase 3—Site remediation (SR)

Phase 4—Post cleanup care, monitoring, and long-term mitigation

(B) Funding for a particular phase of remedial action at a specific site shall be committed when that phase is ready to proceed unless the Commissioner determines that funding of multiple phases, or funding of specific tasks within one of the phases, will result in more efficient use of remedial action funds and/or will better protect the environment and public health.

(C) At the Commissioner's discretion, a portion of the funds available for remedial actions each year may be committed to Remedial Investigation/Feasibility Study, and Remedial Design at sites chosen from the SPL to ensure that these sites will be ready for implementation of clean-up and mitigation measures as soon as funding is available consistent with their relative priority on the SPL.

(2) Project by-pass procedure

The Commissioner may by-pass a hazardous waste disposal site for remedial action and then undertake remedial action at a site with a lower priority for the following reasons:

(A) The Commissioner determines that the next phase of remedial action at a site is not ready to proceed within the time deemed reasonable by the Commissioner.

(B) Funding available at the time of the decision is insufficient to complete the next phase of remedial action at the site.

(3) A site that is by-passed shall retain its relative priority ranking for future funding.

(d) **Removal of sites from the Superfund Priority List**

(1) The Commissioner may, at any time, remove a site from the SPL if he or she determines that:

(A) The remedial actions as defined in Sec. 22a-133a of the Connecticut General Statutes have been completed; or

(B) The site no longer constitutes an unacceptable threat to the environment or public health.

(2) All sites removed from the SPL shall be eligible for funding should the Commissioner determine that new information or future conditions indicate the need for additional remedial action, and the site meets the requirements for funding specified in Sec. 22a-133f of the Connecticut General Statutes.

(e) **The Superfund Priority Score**

The Commissioner shall evaluate the factors listed in this subsection and assign a score for each hazardous waste disposal site deemed eligible for state funded remedial action under the provisions of Sec. 22a-133f of the Connecticut General Statutes. He or she shall then sum the scores of the factors to obtain a total score for the site. The totaled score shall be known as the Superfund Priority Score (SPS) for the site. The Commissioner may recalculate the SPS at any time upon consideration of information which was not included in the original computation.

(1) Exposure Potential: Accessibility

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Maximum score possible=12 pts.

Potential for people who are unauthorized to enter the site, or unaware of the presence of hazardous substances, to come into direct contact with a hazardous substance at the hazardous waste disposal site. The potential for direct contact will be scored as it exists at the time the site is placed on the SPL. The exposure potential may be rescored at the discretion of the Commissioner if he or she determines that such rescoring is warranted by changed conditions at the site and that such rescoring will not interfere with the goals of the program.

Hazardous substances are exposed on the ground surface, or in open or leaking containers, or in closed but unsecured containers; unless the site security measures specified in section 22a-449 (c)-22 of the Regulations of Connecticut State Agencies are in place 12

Site lacks security measures specified in section 22a-449 (c)-22 of the Regulations of Connecticut State Agencies, but all of the hazardous substances on the site are in closed containers which are locked, secured, fenced, marked, or stored in such manner as to make tampering by persons not familiar with the materials difficult. 6

Security measures specified in section 22a-449 (c)-22 of the Regulations of Connecticut State Agencies are present; or the hazardous substance(s) are located entirely below ground; or direct contact with a hazardous substance is otherwise prevented 0

(2) Impact to ground water for the potentially affected area:

Maximum score possible = 30 pts.

For the purposes of this subsection, the “potentially affected area” will be that area within a three (3) mile radius of any hazardous substance at the site. The Commissioner may, at his or her discretion, remove from consideration any portion of such area which the Commissioner judges to be unlikely to be affected by a release to the subsurface from the site.

(A) Ground water classification goal established pursuant to section 22a-426 of the Connecticut General Statutes for the area potentially affected by the site. If more than one goal has been established for the area, the more stringent goal shall apply.

- GAA 5
- GA 4
- GB 3
- GC 2

(B) Potentially affected aquifer, regardless of the ground water quality classification goal established for the area. For the purposes of this subparagraph “stratified-drift areas” shall be those areas delineated as such on the map entitled: “Ground-Water Yields for Selected Stratified-Drift Areas in Connecticut,” United States Geological Survey in cooperation with the Natural Resources Center Department of Environmental Protection, dated 1986, by David L. Mazzaferro, Scale 1:125,000; and “zones of contribution” and “recharge areas”

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shall be those areas delineated pursuant to the provisions of Public Act 88-324, as amended.

The hazardous waste(s) or hazardous substance(s) are located within a stratified-drift area, or a zone of contribution 5

The potentially affected area extends into a stratified-drift area, or the hazardous waste(s) or hazardous substance(s) are located within a recharge area. . 3

Not applicable 0

(C) Population served by public or private water supply wells drawing water from the potentially affected area:

More than 5000 people. 10

1001 to 5000 people 8

101 to 1000 people 7

26 to 100 people 6

Less than 26 people 5

Not applicable 0

(D) Existing aquaculture, agriculture, industrial or commercial uses drawing water from the potentially affected area:

Agricultural or aquaculture application 5

Industrial, commercial, or uses other than drinking water supply 2

No known existing use 0

Note: If a score of 5 points or more has already been assigned pursuant to subparagraph (2) (C) of this subsection, a score of zero (0) shall be assigned for subparagraph (2) (D) of this subsection.

(E) Potential for release of a hazardous substance to the ground water:

Known release (hazardous substance known or reasonably suspected to have been released on, or to have emanated from, the site has been detected in the ground water). 10

Potential release (hazardous substance has been stored or handled such that a release to the soil and/or groundwater may have occurred and there are no known barriers which effectively prevent the migration of the hazardous substance to ground water). 5

No known potential for release (all hazardous substances at the site are, and have been, contained in such manner as to preclude their release to the environment). 0

(3) Impact to surface water for the potentially affected area:

Maximum score possible = 30 pts.

Impact to surface water for the potentially affected area: For the purposes of this paragraph, the “potentially affected area” will be that area within a distance of three (3) miles downstream of any hazardous substance at the site. Such distance shall be measured along the anticipated overland flow path to the watercourse or surface water body, thence downstream along the watercourse or surface water body. The Commissioner may, at his or her discretion, remove from consideration any portion of such area which the

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Commissioner judges to be unlikely to be affected by a release to the surface waters from the site.

(A) Surface water classification goal established pursuant to section 22a-426 of the Connecticut General Statutes for the area potentially affected by the site. If more than one goal has been established for the area, the more stringent goal shall apply,

- AA or SA. 5
- A 4
- B or SB 3
- C or SC 2
- D or SD. 1
- Not Applicable 0

(B) Population served by potable public or private water supply which draws water from the potentially affected area:

- More than 5000 people. 10
- 1001 to 5000 people 8
- 101 to 1000 people 7
- 26 to 100 people 6
- Less than 26 people 5
- No known use 0

(C) Existing aquaculture, agriculture, industrial or commercial uses drawing water from the potentially affected area:

- Agricultural or aquaculture applications 5
- Industrial, commercial, or uses other than drinking water supply 2
- No known existing use 0

Note: If a score of 5 or more has already been assigned pursuant to subparagraph (3) (B) of this subsection, a score of zero (0) will be assigned for subparagraph (3) (C) of this subsection.

(D) Existing recreational use:

Locations within the potentially affected area are utilized for swimming, boating, fishing, or other water contact recreation. 5

No known recreational use(s) within the potentially affected area 0

(E) Potential for release of a hazardous substance to surface water:

Known release (hazardous substance known or reasonably suspected to have been released on, or to have emanated from, the site has been detected in surface water). 10

Potential release (hazardous substance has been stored or handled such that a release to surface water may have occurred and there are no known barriers which effectively prevent the migration of the hazardous substance to surface water) 5

No known potential for release (all hazardous substances at the site are, and have been contained in such manner as to preclude their release to the environment)

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(4) Toxicity, persistence, mobility, and quantity of hazardous substances the Commissioner has reason to believe are present at the site.

The Commissioner shall evaluate the hazardous substance(s) at the site for toxicity, persistence, and mobility. The substance with the highest combined score for these three characteristics shall be considered representative of the potential hazard posed by the site for subparagraphs (4) (A) (B) and (C) of this subdivision of the scoring system. The estimated waste quantity will be the sum of all hazardous wastes which may have been discharged or disposed at the site.

Maximum score possible = 15 pts.

(A) Toxicity

- *SAX level 3 5
- SAX level 2. 3
- SAX level 1. 2
- Not applicable 0

*Sax, N.I., "Dangerous Properties of Industrial Materials," Van Nostrand Rheinhold Co., New York, New York, 6th edition, 1984, as revised and updated.

(B) Persistence

- Metals, polycyclic compounds, and halogenated hydrocarbons 3
- Substituted and other ring compounds. 2
- Straight chain hydrocarbons 1
- Easily biodegradable compounds 0

(C) Mobility

A hazardous substance which may change physical state (eg. frozen to liquid state) due to normal seasonal ranges of temperature shall be scored in accordance with its most mobile form within such seasonal temperature range.

Gas (substances which would essentially completely dissipate into the atmosphere if not physically controlled) 4

Liquid (including substances in liquid form and substances dissolved in a liquid carrier or solvent). 3

Slurry or sludge (substances suspended or mixed into a liquid carrier such that the suspension or mixture has the physical properties of a liquid) 2

Solid (substances not meeting the criteria specified above) 1

(D) Estimated quantity of hazardous substances that may have been discharged or disposed of at the site:

Included in the quantity shall be all hazardous wastes and hazardous substances which may have been disposed at the site; any solid wastes with which such hazardous substances or wastes may have been mixed; any contaminated soil materials brought to the site from another location off the site; and any soil materials on site which have been mechanically mixed with the hazardous substance(s) or waste(s). In general, soil materials, solid waste, groundwater, and surface water contaminated by hazardous substance(s) or waste(s) due

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solely to the migration of such contaminants under the influence of natural forces such as gravity or infiltrated precipitation will not be included in the calculation of the quantity of waste.

Greater than 63 tons or cubic yards; or greater than 251 drums; or greater than 12,550 gallons 3

11 to 63 tons or cubic yards; or 41 to 251 drums; or 2,050 gallons to 12,550 gallons or unknown quantity of hazardous waste disposed within the past ten years 2

Less than 11 tons or cubic yards; or less than 41 drums; or less than 2,050 gallons; or unknown quantity of hazardous waste disposed more than ten years ago 1

(5) Impact to the environment:

Maximum score possible = 12 pts.

(A) Potential for wildlife or domesticated animals to come into direct contact with hazardous substances at or emanating from the site.

Hazardous substances are exposed on the ground surface; or are in open or leaking containers; or are below ground and there is evidence of burrowing in the area of the hazardous substance(s). 3

Hazardous substances are stored in closed containers which cannot be opened by animals or gnawed through. 2

Hazardous substances are entirely below ground and undisturbed by borrowing or are stored in a building or structure secured against animal entry . . 0

(B) Potentially affected Connecticut Species of Special Concern within a one (1) mile radius measured from any hazardous substances at the site, not from the facility or property boundary.

Connecticut Species of Special Concern are those species of plants and animals designated by the Department of Environmental Protection as rare species, including species which occur in very small numbers or populations, or both, relative to other related taxa in Connecticut, and thus are seldom observed in broad-scale surveys in the state.

Rare Species (Group I). 4

Infrequent or Declining Species (Group II) 3

Range or habitat limited species (Group III) 2

Not applicable 0

(C) Potentially affected inland or coastal wetlands as defined in Sections 22a-29 and 22a-38 of the Connecticut General Statutes, as amended, measured from the hazardous substance, not from the facility or property boundary.

Minimum 5 acre wetland within 1/2 mile 3

< 5 acre wetland within 1/2 mile 2

No wetland area within 1/2 mile. 0

(D) Hazardous substance(s) at the site are located within a flood boundary, either wholly or partially, as designated on maps published by the National Flood Insurance Program.

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Within a 100 year flood boundary; or no flood boundary mapped, but repetitive flooding is known to occur. 2

Within a 500 year flood boundary; or repetitive flooding is not known to have occurred. 1

Not located in a flood boundary; or no flooding has been known to occur 0

(6) Other factors:

Maximum score possible = 6 pts.

(A) Fire hazard at the hazardous waste disposal site:

The Commissioner shall evaluate the hazardous substance(s) at the site to determine potential fire hazards. The substance that has the highest score shall be considered representative of the potential fire hazard due to ignitability for the purposes of this scoring system.

Known fire hazard (hazardous substance meets the characteristics of ignitability pursuant to 40 CFR 261.21) 2

No known fire hazard (hazardous substance does not meet the characteristics of ignitability pursuant to 40 CFR 261.21) 0

(B) Potential for release of a hazardous substance to the atmosphere at the site: Known release (hazardous substance detected in the atmosphere at the site) 2

Potential release (hazardous substance can reasonably be expected to migrate to the atmosphere at the site) 1

No known potential for release 0

(C) Hazard Ranking Score. The final Hazard Ranking Score as described in 40 CFR 300 Appendix A shall be considered. If a final HRS score has not been calculated, the preliminary score shall be considered.

HRS score 28.5 or greater 2

HRS score 10 to 28.4. 1

HRS score less than 10 or not applicable 0

(Effective August 25, 1989)