

SEP 9, 1980

MEMORANDUM FOR: J. B. Martin, Director  
 Division of Waste Management

FROM: K. R. Goller, Director  
 Division of Siting, Health & Safeguards Standards, SD

SUBJECT: STANDARD FORMAT AND CONTENT OF SITE CHARACTERIZATION  
 FOR HLW GEOLOGIC REPOSITORIES (SF&C)

At a meeting on 8/27/80, members of the High-Level Waste Technical Development Branch, Division of Waste Management, and members of my staff discussed the comments on the SF&C submitted by your office.

Agreement among the staff was reached on how to restructure the guide and the establishment of criteria to address the technical comments. The new format of the guide will be as follows:

Part A: Standard format and content guidance for the introduction and describing the criteria and decision process of selecting a candidate area and sites (old Part A, Chapters 1 and 2).

Part B: Standard format and content guidance for describing the sites, waste form and emplacement environment, and conceptual design (old Part B, Chapters 1-10).

The information that will be requested in this section are those which can be obtained through exploration conducted by the following methods:

1. From the surface (geologic measurements, surface hydrology, etc.)
2. By indirect means, e.g., refraction, earthquake, seismology, geophysics, remote sensing, seismic surveys, etc.
3. From a limited number of borings, e.g., regional hydrology, gross site hydrology.
4. From the literature.

The information that can be requested in the design sections must fall within the following criteria:

1. Conceptual design is the link between site evaluation and the site characterization program.

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J. B. Martin

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- 2. Functional purpose or design features must be related to site evaluation.
- 3. Therefore, information of the following categories can be requested:
  - A. Directly needed, e.g., thermal loading
  - B. Indirectly needed, e.g., effectiveness of backfill
  - C. Establish compatibility between site and design concept

Part C: Standard format and content guidance identifying pertinent issues (old Part A, Chapters 3-10).

Part D: Standard format and content guidance for presenting the site characterization program (old Part A, Chapters 11 and 12 and Part B, Chapter 11).

Your requested date for a new draft by September 8, 1980, is very tight. We will try to meet it but can only assure you that it will be done within the week of September 8, 1980.

Karl R. Goller, Director  
Division of Siting, Health &  
Safeguards Standards  
Office of Standards Development

cc: K. Steyer, SD  
M. Bell, NMSS

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SD Task No.

OFFICE	SSSB	SSSB	SSSB	AD/SH	D/SHSS
SURNAME	SBrocoum:Das	LLBeratan	PComella	ICRoberts	KRGoller
DATE	9/2/80	9/ - /80	9/2/80	9/5/80	9/ - /80

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Division of Waste Management

FROM: K. R. Goller, Director  
Division of Siting, Health & Safeguards Standards, SD

SUBJECT: STANDARD FORMAT AND CONTENT OF SITE CHARACTERIZATION  
FOR HLW GEOLOGIC REPOSITORIES (SF&C) REG GUIDE

At a meeting on 8/27/80, members of the High-Level Waste Technical Development Branch, Division of Waste Management, and members of my staff discussed the comments on the draft SF&C Reg Guide submitted by your office.

Agreement among the staff was reached on how to restructure the guide and the establishment of criteria to address the technical comments received from your office. The new format of the guide will be as follows:

New Part A: Standard format and content guidance for the introduction, and the description of the criteria and decision process of selecting a candidate area and site (old Part A, Chapters 1 and 2).

New Part B: Standard format and content guidance for describing the site, conceptual design of the repository, waste forms and emplacement environment. (old Part B, Chapters 1-10).

The information that will be requested in this section is that which can be obtained by the following methods:

1. Exploration from the surface, e.g., geologic mapping, determination of surface hydrology, etc.
2. Exploration by indirect means, e.g., use of seismic refraction and reflection, study of seismology, other geophysical methods, remote sensing, etc.
3. From a limited number of borings, e.g., determination of regional hydrology and gross site hydrology.
4. From the review of the literature.

The information to be requested in the design sections must be based on the following:

1. Conceptual design is the link between site evaluation and the site characterization program.

- 2. Functional purpose of each design parameter must be related to site evaluation.
- 3. Therefore, the criteria to be used for requesting specific design information is:
  - A. Directly needed, e.g., thermal loading
  - B. Indirectly needed, e.g., effectiveness of backfill
  - C. Establish compatibility between site and design concept

New Part C: Standard format and content guidance identifying issues, e.g., potential problems, favorable characteristics, potentially adverse characteristics (old Part A, Chapters 3-10).

New Part D: Standard format and content guidance for presenting the site characterization program (old Part A, Chapters 11 and 12 and old Part B, Chapter 11).

Your requested date for a new draft by September 3, 1980, is very tight. We will try to meet this, but can only assure you that it will be done within the week of September 3, 1980.

Karl R. Goller, Director  
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SD Task No. SS 027-4

\*See previous yellow for concurrence.

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FROM: K. R. Goller, Director  
Division of Siting, Health & Safeguards Standards, SD

SUBJECT: STANDARD FORMAT AND CONTENT OF SITE CHARACTERIZATION  
FOR HLW GEOLOGIC REPOSITORIES (SF&C) REGULATORY GUIDE

At a meeting on 8/27/80, members of the High-Level Waste Technical Development Branch, Division of Waste Management, and members of my staff discussed the comments on the draft SF&C Regulatory Guide submitted by your office.

Agreement by the staff was reached on how to restructure the guide and the establishment of criteria to address the technical comments received from your office. We are redrafting the guide using the new format and criteria and will have a revised draft for your review within a week. We need to have your comments within a week after issuance. Small changes can be accommodated in the time available. Any major changes that are requested may delay issuance of the guide on schedule and a management decision will have to be made whether the changes should be made at this time or deferred until after the Commission and ACRS review comments are responded to. The new format of the guide will be as follows:

New Part A: Standard format and content guidance for the introduction, and the description of the criteria and decision process of selecting a candidate area and site (old Part A, Chapters 1 and 2).

New Part B: Standard format and content guidance for describing the site, conceptual design of the repository, waste forms and emplacement environment. (old Part B, Chapters 1-10).

The information that will be requested in this section is that which can be obtained by the following methods:

1. Exploration from the surface, e.g., geologic mapping, determination of surface hydrology, etc.
2. Exploration by indirect means, e.g., use of seismic refraction and reflection, study of seismology, other geophysical methods, remote sensing, etc.
3. From a limited number of borings, e.g., determination of regional hydrology and gross site hydrology.
4. From the review of the literature.

The information to be requested in the design sections must be based on the following:

1. Conceptual design is the link between site evaluation and the site characterization program.
2. Functional purpose of each design parameter must be related to site evaluation.
3. Therefore, the criteria to be used for requesting specific design information is:
  - A. Directly needed, e.g., thermal loading
  - B. Indirectly needed, e.g., effectiveness of backfill
  - C. Establish compatibility between site and design

New Part C: Standard format and content guidance identifying issues, e.g., potential problems, favorable characteristics, potentially adverse characteristics

New Part D: Standard format and content guidance for presenting the site characterization program (old Part A, Chapters 11 and 12 and old Part B, Chapter 11).

Your requested date for a new draft by September 8, 1980, is very tight. We will try to meet this, but can only assure you that it will be done within the week of September 8, 1980.

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