

Software Requirements Specification

Revision 00

for the

Yucca Mountain Repository

Environmental Impact Statement

Comment Response Database System

February 19, 1999

Table of Contents

<i>Process Overview</i>	5
Public Comment Period	5
Comment Acquisition and Routing	5
Comment Identification and Entry	6
Optical Character Recognition	6
Electronic Comment Bracketing	7
Response Development, Review, and Approval	7
Comment Response Document Generation	7
<i>Comment Document Data Records</i>	9
Comment Document Record Creation	9
Comment Document Identifier	9
Comment Document Type	10
Date Received	10
Date/Time Entered	10
Entered By	10
Date/Time Updated	11
Updated By	11
Comment Document Image	11
Unique/Duplicate/Similar To Indicator	11
Site Recommendation/License Application Comments Indicator	12
Illegible Comments Indicator	12
Supplemental Materials/Enclosures Indicator	12
Number of Pages	12
Commentor Identification	13
Miscellaneous Notes Text	14
<i>Comment Data Records</i>	15
Comment Record Creation	15
Date/Time Entered	15
Entered By	15
Comment Identifier	15
Comment Text	16
Comment Subject Index Category	16
Comment Start Page	17

Response Writer	17
Response Due Date	18
Response Reviewer(s)	18
Response Approver(s)	18
EIS Change Indicator and Control Number	18
Comment/Response Summaries	19
Comment Rebracketing	19
<i>Response Writing, Review, and Approval</i>	<i>21</i>
Response Status	21
Response Writing	21
Response Text	21
Date/Time Response Updated	22
Response Review	22
Response Approval	22
Multiple Response/Review Cycles	23
Date Response Approved	23
Pre-approved Responses	23
<i>System Output Requirements</i>	<i>24</i>
Comment Response Document	24
Comment Response Document Indices	24
Preformatted Reports	24
Ad hoc Reports	25
Status and Work Assignment Reports	25
Comment Document Posting on YMP Internet Web Site	25
<i>User Interface Requirements</i>	<i>26</i>
<i>System Privileges and User Authentication</i>	<i>27</i>
System Access	27
Response, Review, and Approval Privileges	27
System Administrators	27
<i>User Training and Documentation</i>	<i>28</i>
User Training	28
User Manual	28
Online Help	28
System Documentation	28

<i>Miscellaneous Requirements</i>	29
Capacities	29
Network Access	29
Searching	29
System Activity Logging	30
Work Pending E-mail Notifications	30
<i>Implementation Priorities</i>	31
<i>Appendix A</i>	32

Process Overview

This section provides a high-level overview of the process that will be used to receive, store, and respond to public comments on the Yucca Mountain Repository Environmental Impact Statement (EIS). The overview is not intended to provide complete details or to be a definitive description of the process. Rather, the intent is to characterize the environment in which the EIS Comment Response Database System will function.

The requirements for system components and functions mentioned in this section are defined in greater detail in the sections following the process overview.

Public Comment Period

The public will have an opportunity to submit comments during a fixed period of time following the publication of the EIS. It is currently anticipated that this period will begin on August 1, 1999 and will have a duration of at least 90 days.

Comment Acquisition and Routing

Comments will be accepted in a variety of forms, including regular mail, email, fax, public hearing transcripts, and correspondence with government officials. There will be no facility other than e-mail for submitting comments via the Internet. Each separate submission is considered a comment document and will be routed to the organization responsible for receiving comments and performing initial processing. Comment documents not in paper form (e.g. e-mails) will be converted (transcribed, printed, etc) as necessary.

The receiving organization stamps the date received on the first page of the comment document and assigns a unique, permanent document number to each comment document. The document number is affixed to each page of the document, to any attachments, and to the envelope in which a mailed comment is received.

The receiving organization makes the initial comment document record entry in the database, entering the document identifier, date received,

document type, and commentor name. Three copies of each document are then made and the original comment document and one copy are provided to the EIS Administrative Record (AR) Coordinator. The AR Coordinator will retain the original and submit the copy to the Yucca Mountain Project (YMP) Records Processing System.

Comment Identification and Entry

The remaining two document copies are delivered to the organization responsible for processing comments. They add more detailed commentor and document status information to the comment document record.

Each comment document may contain multiple comments. Subject matter experts analyze the comment documents. They identify and mark individual comments on the document. This process is referred to as comment identification or bracketing. All comment identification will be performed locally (in Las Vegas) by a small number of analysts.

After the bracketing is completed, the document is scanned and the resulting image is stored as part of the comment document record.

Each comment is assigned an identifier and entered into the database as a separate record. The comment text is entered along with additional related information, including the assigned subject category and the names of individuals that will be involved in developing a response to the comment. The source comment document identifier is also entered to provide traceability from comments back to their source comment documents.

Optical Character Recognition

Although the current assumption is that a manual data entry process will be used to input comment text, the possibility of using Optical Character Recognition (OCR) during the scanning process has been discussed.

The comment text is eventually entered into the database, but the actual capture of text from the comment document is external to the database system itself. Since no custom development or electronic linkage to the database is required to support OCR, it is expected that the introduction of OCR into the process would have little or no impact on design or implementation of the database system.

Electronic Comment Bracketing

The possibility of acquiring software to support electronic bracketing of comments has been discussed as an alternative to manually marking individual comments on comment documents. It is believed that this would reduce the amount of work involved in both the initial and subsequent changes to comment identification.

A search for products which provide this functionality is still being conducted, but no viable candidates have yet been identified. The current assumption is that comments will be bracketed manually rather than electronically.

Since the comment bracketing process itself is external to the database system, it is expected that the introduction of electronic bracketing into the process would have little or no impact on design or implementation.

Response Development, Review, and Approval

A response is developed for each identified comment. The response is then reviewed by one or more designated individuals. The response writer incorporates any modifications arising from the review process and submits the response for re-review and approval. The response is considered final when approval is granted and it can no longer be modified by the response author. Additional iteration(s) of the response and review process occur as necessary. The response and review text from each iteration is saved as documentation of the process used to arrive at the final response.

Comment Response Document Generation

After the public comment period ends and approved responses have been written for all comments, a final document in ASCII text format containing all comments and responses is produced. Several cross-reference indices into the comments and responses are also generated.

The comment and response document described above will undergo further formatting external to the database system to produce the final EIS Comment Response Document. It will be published and a copy provided to

the EIS AR Coordinator for submittal to the YMP Records Processing System.

Comment Document Data Records

This section defines system requirements for the data elements and functions associated with the entry, storage, and retrieval of comment document data.

Comment Document Record Creation

The system must provide users that have the appropriate privilege the ability to create and update data records representing submitted comment documents.

The comment document record creation function consists of two parts. The first part is done by the organization responsible for receiving and initial processing of comment documents. This organization must have the ability to create a comment document record by entering the Comment Document Identifier, Comment Document Type, the Date Received, and the Commentor Name.

The organization responsible for comment processing subsequently enters the remainder of the comment document data. This organization must have the ability to retrieve comment document records by Comment Document Identifier and to add additional information to complete the record.

The system must perform a check to ensure that valid values have been entered for all data elements during both phases of data entry and prompt the user to correct any errors prior to creating or updating the record.

A description of the data fields, legal values, and constraints that define a complete comment document record follows.

Comment Document Identifier

The unique identifiers for comment documents are not generated by the database system. Rather, they are generated and permanently affixed to comment documents as they are received and initially processed. The system must require that the unique identifier be input as the comment document record is created.

The identifiers are alphanumeric and consist of or contain a sequential, numeric element that can be used to sort comment documents. A null value for this data element is not allowed. The value in this field may not be edited after the record has been created.

Comment Document Type

The system must require the user to select the comment document type from a list of valid values. A null value for this data element is not allowed. The valid comment document types and their corresponding codes are:

- LT Letter
- PC Postcard
- FX Fax
- EM Email
- HT Public hearing transcript
- PT Petition
- OT Other

Date Received

The system must require the input of the date the comment document was received. A null value for this data element is not allowed.

Date/Time Entered

The system must automatically store the date and time the comment document record was created as a field in the record. A null value for this data element is not allowed. The value in this field may not be edited after the record has been created.

Entered By

The system must automatically record the name of the user creating the record as a data element in the comment document record. A null value for this data element is not allowed. The value in this field may not be edited after the record has been created.

Date/Time Updated

The system must automatically store the date and time the comment document record was updated (data entry completed) as a field in the record. A null value for this data element is not allowed. The value in this field may not be edited after the record has been created.

Updated By

The system must automatically record the name of the user updating the record (completing the data entry) as a data element in the comment document record. A null value for this data element is not allowed. The value in this field may not be edited after the record has been created.

Comment Document Image

The system must support the entry, storage, and retrieval of an image of the comment document with comments bracketed. A null value for this data element is allowed initially because comments are not yet bracketed at the time the comment document record is created. However, the corresponding individual comment data records may not be created until this image has been entered into the system

Unique/Duplicate/Similar To Indicator

The system must provide a data element that specifies the relationship of the comment document to other comment documents. It must contain one and only one of the following values:

- Unique
- Duplicate of another document
- Similar to another document

The default value is 'Unique'. The field may not be null. If the entered value is not 'Unique', the system must require the user to enter the comment document and comment identifiers for the comment that this comment duplicates or is similar to. Users must be able to update the value of this data element at any time.

Site Recommendation/License Application Comments Indicator

The system must provide a data element that indicates whether the comment document contains any comments that may be relevant to either or both of the YMP Site Recommendation or License Application documents. The value for this data element will correspond to one of the following:

- No SR or LA comments
- SR comments only
- LA comments only
- Both SR and LA comments

Users must have the ability to set the value of the indicator when the comment document record is created and update it at any time thereafter. A null value is not allowed for this data element. The default value will be 'No SR or LA comments'.

Illegible Comments Indicator

The system must provide a data element that indicates whether the comment document contains any illegible comments. Users must have the ability to set the indicator based on the contents of the comment document. A null value is not allowed for this data element. The default value will be that the document does not contain any illegible comments.

Supplemental Materials/Enclosures Indicator

The system must provide a data element that indicates whether any supplemental materials or enclosures were received with the comment document. Users must have the ability to set the indicator based on the contents of the comment document. This field may be null, which indicates that there were no supplemental materials or enclosures.

Number of Pages

The system must provide a data element for the entry, storage, and retrieval of the number of pages in the comment document. A null value is not allowed for this data element.

Commentor Identification

The following commentor identification information is entered with each comment document:

- Commentor Title (Mr./Mrs./Ms./Miss/Dr./etc.)
- Last Name
- First Name
- Middle Name (or Initial)
- Suffix (Jr., Esq., Ph.D., M.D., etc.)
- Street Address/P.O. Box
- City
- State
- Country (default USA)
- Postal Code
- Phone number
- Fax Number
- E-mail address
- Organization (e.g. NWTRB)
- Affiliation
- Addressee (Wendy Dixon (most), Congresspersons, etc.)

All of the elements listed above will be stored as ASCII text values except Affiliation, which will be selected from the following set of values:

- Federal Government
- State Government
- Local Government
- Native American Organization
- Citizens Group
- Special Interest Group
- Elected Official
- Business

Null values are not allowed for Last Name. 'Anonymous' will be entered if no name is provided. Null values are allowed for the other commentor identification data elements.

Miscellaneous Notes Text

The system must provide a data element that allows users to enter miscellaneous information regarding the comment document. This field is intended to be used to document any anomalies, discrepancies, or unusual conditions or circumstances related to the document. A null value is allowed for this field. The maximum size of this field must be as large as possible and constrained only by limitations imposed by operating system and database software.

Comment Data Records

This section defines system requirements for the data elements and functions associated with the entry, storage, and retrieval of comments identified during the comment bracketing process.

Comment Record Creation

The system must provide a function that allows users with the appropriate privilege to create a data record representing a bracketed comment on a comment document. The required data fields, legal values, and constraints are described below. The system check to ensure that valid values have been entered for all data elements and prompt the user to correct any errors prior to creating the comment record.

Date/Time Entered

The system must automatically store the date and time the comment record was created as a field in the record. A null value for this data element is not allowed. The value in this field may not be edited after the record has been created.

Entered By

The system must automatically record the name of the user creating the record as a data element in the comment record. A null value for this data element is not allowed. The value in this field may not be edited after the record has been created.

Comment Identifier

The comment identifier must uniquely distinguish a comment from every other comment in the database. It shall consist of two parts: a comment document identifier and a unique sequence number. As the user enters a new comment data record, the system must prompt for the identifier of the source comment document. The system must then generate the unique sequence number that distinguishes the comment from all other comments that have been extracted from that comment document. This identifier shall be numeric and sequential, with the sequence starting at one (1) for each comment document. Both parts of the comment identifier must be stored

with the comment data record. A null value for either part of this data element is not allowed.

Comment Text

The system must support the entry of the full comment text. A null value for this data element is not allowed as text will be entered regardless of whether the comment is being summarized (see Comment/Response Summaries section below). The maximum size of this field must be as large as possible and constrained only by limitations imposed by operating system and database software.

Comment Subject Index Category

The comment subject index category, also referred to as the comment bin, identifies the general topic addressed by the comment. A null value for this data element is not allowed. Its value is to be selected from a set of valid subject index values. The current set of values is:

- Purpose and Need
- Proposed Action
- Affected Environments
- Analysis Results
- Repository Performance
- Transportation
- No-Action Alternative
- Cumulative Impacts
- Mitigation
- Irreversible and Irretrievable Commitment of Resources
- Environmental Requirements
- Inventory
- Repository Design
- Retrieval
- Receipt Before 2010
- Consultations
- Policy Issues
- NEPA Compliance
- DOE Credibility
- Not Applicable to YM EIS

- Other

Subject index categories may also contain subcategories. An arbitrary number of levels of categories may exist. Comments may be associated with a category at any level in the hierarchy, but each comment may be assigned to one and only one category. Every system function that includes a representation of subject index categories must do so according to the hierarchy.

Users with system administrator privilege must have the ability to change the subject index category value assigned to a comment at any time following the initial creation of the comment data record. This procedure is referred to as rebinning the comment. Comments will be rebinned individually by editing their comment subject category value. No requirement exists for a function that would allow for the selection of multiple comments to rebin as a group.

System administrators must also have the ability to update the set of valid subject index category values at any time. The ability to add, modify, or delete a category anywhere in the subject index hierarchy must be provided. It must also be possible to optionally specify the name of an authorized response writer as the default response writer for each subject index category.

Comment Start Page

The system must provide a data element for the entry, storage, and retrieval of the page number on which the comment starts in the comment document. A null value is not allowed for this data element.

Response Writer

The system must provide a data element for the name of the person assigned to develop the response. The default value for this element will be the name of the designated response writer for the subject index category to which the comment is assigned. The default value may be manually overridden at the time the record is created or at a later date by selection of a response writer from the list of authorized response writers (those individuals with the corresponding system privilege).

A null value is allowed for this data element and indicates that the response writer is 'Unassigned'. This situation occurs when there is no response writer associated with the subject index category to which the comment is assigned and no response writer is entered manually.

Response Due Date

The system must provide a data element for the date on which the response is due. Null values are allowed for this data element.

Response Reviewer(s)

The system must provide a data element for the names of individuals assigned to review the response. These names must be selected from a list of authorized reviewers (i.e. individuals with reviewer privilege). The maximum number of reviewers that may be specified is limited only by the number of authorized reviewers on the list. Null values are allowed for this data element because there will be cases in which it is not possible to assign a reviewer at the time the comment record is created.

Response Approver(s)

The system must provide a data element for the names of the individuals responsible for approving the response. The approvers must be selected from the list of authorized approvers (i.e. individuals with approval privilege). The maximum number of approvers that may be specified is limited only by the number of authorized approvers on the list. Null values are allowed for this data element because there will be cases in which it is not possible to assign an approver at the time the comment record is created.

EIS Change Indicator and Control Number

The system must provide a data element that indicates whether a comment has the potential to or has caused a change to the EIS. Values for this data element are:

- No EIS change
- Potential EIS change
- EIS was changed

The user must have the ability to set the indicator when the comment data record is created and at any time thereafter. The indicator field may not be null. The default value will be 'No EIS change'.

The system must prompt the user for the control number associated with the EIS change when the indicator value is set to 'EIS was changed'. The entered control number is an alphanumeric quantity and must be stored and displayed with the other information associated with the comment. This field must be null until the indicator is set to 'EIS was changed' and must not be null while the indicator is set to that value.

Comment/Response Summaries

Comment/response summaries are comments and associated responses that are developed internally rather than received from the public. They are intended to be used in cases where a determination is made that a large volume of very similar comments warrants summarization rather than individual responses.

The system must provide support for the entry, storage, and retrieval of comment/response summaries. The system must allow the user to associate a comment with a comment/response summary at any time. This may occur at the time the comment record is initially created. In this case the actual comment text is still entered, even though it is known that a comment/response summary will be used. The system must also support the association of comments that are already in the system with comment/response summaries.

The current intent is to respond to each comment individually rather than using comment/response summaries. Because this is subject to change, the comment/response summary capability is still required. This capability may be assigned a relatively low development priority, but must be available when the system goes into production use.

Comment Rebracketing

Modifications to the identification of comments in a comment document may be required. This is known as comment rebracketing. The comments

identified in the rebracketing of a comment document replace the comments from the previous bracketing.

The system must provide a function that allows users with the appropriate privilege to rebracket comment documents. The user must be prompted for the appropriate comment document identifier. After verification, all comment data records associated with the comment document are deleted from the system. The document image is also deleted from the comment document record. From that point on, entry of a new document image and new comment data records will be performed as described above. An entry must be written to the system activity log documenting that the rebracketing operation was performed.

It must also be possible to modify the bracketing of one or more comments in a comment document without affecting other comments from that document that have already been identified and entered into the system. This may involve the deletion of a comment, the modification of the text that comprises a comment, or the splitting of a single comment into multiple comments. If a comment is split, one of the resultant new comments will retain the original comment sequence number and new sequence numbers will be assigned to the others. In each of the above cases, the system must prompt the user for the input of a new comment document image that reflects the new bracketing, which will replace the previous stored image.

Response Writing, Review, and Approval

This section defines system requirements for the data elements and functions associated with the development, review, and approval of comment responses.

Response Status

The system must track the current status of each response. The valid values are:

- Open
- Incomplete
- Complete
- Reviewed
- Approved

The initial value is 'Open' if no response writer has been assigned. It is updated to 'Incomplete' when one is assigned. A null value for this data element is not allowed.

Response Writing

The system must support the development of a response to each comment that has been entered into the system. The individual identified by the response writer data element of a comment record is the only one that is allowed to create and edit the response to that comment. The response writer must be able to change the response status to 'Complete' after entering the response. This will lock the response, making it non-editable by the response writer, and initiate the response review process.

Response Text

The system must provide a data element supporting entry, storage, and retrieval of initial and modified versions of the response text. A null value for the initial response is not allowed unless the response is a reference to a pre-approved response. The modified version may be null. The maximum size of this field must be as large as possible and constrained only by limitations imposed by operating system and database software.

Date/Time Response Updated

The system must automatically store the date and time that a response was created or last updated. Any previously stored value is overwritten each time a response version is saved. A null value for this data element is not allowed.

Response Review

The system must support the entry, storage, and retrieval of a response review for each of the reviewers identified in a comment data record.

The system must allow the reviews of a response to be entered into the system concurrently. Each reviewer will be able to view the text that has been entered and saved for all other reviews.

Each review will initially be marked 'Incomplete'. Each reviewer must be able to mark their review 'Complete' when they are finished with it. When all reviews are marked 'Complete', the response writer may optionally enter a modified version of the response. It is considered a new revision of the response and is subject to another round of comments. The modified response and review texts must not overwrite the previous versions, which are saved to document the response development process and must be viewable with the rest of the data associated with the comment. When all comments have been resolved and the response text is ready to be submitted for approval, the response writer then marks the response status as 'Reviewed'.

Response Approval

When the response status is marked 'Reviewed' it is examined by the designated approver(s). The approver must be able to change the status to either 'Approved' or 'Incomplete' depending on the outcome of the approval process. If the response is disapproved, another iteration of the response/review cycle is initiated.

The response remains locked when the status is 'Approved'. Only a system administrator will have the ability to change the status once it is in the 'Approved' state. This action will be taken only in cases where an approved

response needs to be reopened for revision. This case will be handled as another iteration of the response/review cycle. That is, the response status is set to 'Incomplete' and a new revision of the response is developed.

Multiple Response/Review Cycles

The system must support multiple iterations of the response review cycle. All the data elements associated with an iteration (the initial and modified responses, the associated reviews, and status information) must be saved and be viewable with the rest of the information pertaining to the comment and response.

Date Response Approved

The system must automatically store the date and time the comment response is approved. A null value for this data element is allowed and indicates that the response has not been approved. The value in this field may not be edited after the record has been created except in the case where an approved response is reopened for modification.

Pre-approved Responses

The system must support the entry, storage, and retrieval of pre-approved responses that have been developed to address anticipated comments.

All pre-approved responses in the system must be available for reference by response writers as they develop comment responses. The system must allow the response writer to view the responses, select all or part of any pre-approved response text, and add the text to the response they are developing. No recording or tracking of the fact that the text was taken from a pre-approved response is required.

The review and approval process for a response containing pre-approved response text does not differ from the normal process.

System Output Requirements

This section defines the requirements for outputs that the system must produce.

Comment Response Document

The system must produce a document containing all comments and responses in ASCII text format which will be used to produce the final Comment Response Document. This document will contain no scanned document images.

Comment Response Document Indices

The system must also produce cross reference indices of the Comment Response Document in the following formats:

- Alphabetically by commentor
- Comment document number
- Response - Comment Contributor Correlation

Preformatted Reports

The system must have the capability to produce preformatted reports on comments organized by:

- Commentor Last Name
- Comment Document Identifier
- Comment Identifier
- Organization
- City
- State
- Country
- Postal Code
- Area Code
- Date Received
- Subject Index Category (and Subcategory)
- Response Writer

Ad hoc Reports

The system must have an ad hoc report generation capability. The user must be able to customize reports by specifying:

- Inclusion or exclusion of specific data elements
- Selection of data matching a pattern applied to system data elements
- Sort order

Status and Work Assignment Reports

The system must have the capability to produce reports containing information on the current status of the response process and on work that has been assigned to users. The status reports shall contain the current number of responses pending and completed. It must be possible to categorize and sort the report by:

- Response writer
- Reviewer
- Subject index

Each system user must be able to produce a report which lists the work that has been assigned to them.

Comment Document Posting on YMP Internet Web Site

The requirement to post Comment Document images on the YMP Internet Web Site as the documents are received and entered into the database has been dropped.

User Interface Requirements

All comment and response data must be traceable back to the location of the comment in the original comment document. Every user screen containing a comment, response to a comment, or a response review must provide a mechanism by which the user may display an image of the bracketed comment document that contains the associated comment. The initial view must display the page on which the comment starts. The user must be able to scroll the document image vertically in both directions from that initial point and to close the view when viewing has been completed.

Additional specifics of the user interface layout will be further defined during the interface prototyping process.

System Privileges and User Authentication

System Access

All access to the system will be via username/password authentication. That is, all users must have an established system account and enter their password each time they access the system.

Response, Review, and Approval Privileges

Privileges for access to system functions will be granted to users based on need. The system must ensure that the user has the required privilege before allowing access to any system function. An individual user may have one or more of these privileges at a given time. Access to the comment response writing, review, and approval functions will be controlled in this manner.

System Administrators

A system administrator user class must also be provided. Administrators will also authenticate via username/password and have access to all system functions described above.

Administrators will be the only users with the ability to perform privileged system functions and modify certain system data elements. Administrator privilege will be required to:

- Rebin comments
- Rebracket a comment document
- Modify the subject index
- Administer user accounts and privileges

Additional administrator functions will be added to the list as they are identified.

User Training and Documentation

User Training

Classroom-style training with written classroom materials must be provided. The training must support two classes of users: system administrators and users involved in response development and review. The training must cover basic system functions available to all users as well as the specific privileged functions available to the class of users being trained

User Manual

A user manual is not required.

Online Help

Online help is not required.

System Documentation

System design and implementation information must be well documented since it is anticipated that the software will be reused by other organizations to support the comment and response process for the Site Recommendation and License Application documents.

Miscellaneous Requirements

Capacities

The system must have the capacity to store at least 15000 comment document records. The system must have the capacity to store a cumulative total of at least 25000 individual comments/responses, comment/response summary records, and pre-approved responses

The system must be capable of supporting 25 concurrent users.

Network Access

The system will be hosted on a server on the YMP Intranet. Most users will have access to the system via their permanent connection to the YMP internal network. Remote system access options for users without such a connection include:

- Internet access using SecuRemote software on the client computer
- Dial-up connection

It has been noted that the bandwidth limitations of dialup connections may degrade the usability of system functions involving data transfers of significant size.

Searching

The system must support searching for text that matches strings entered by the user. The user must be able to select one or more of the following areas in which to perform the search:

- Comments
- Responses
- Response reviews
- Pre-approved responses
- Comment/response summaries

Global text replacement is not required. Full-text search capability is not required.

The specific formats for the interface components to support search text entry and results presentation will be further defined through the interface prototyping process.

System Activity Logging

A system activity log file must be generated. Only essential event information will be captured:

- User logins including username, date/time, and client IP address
- Comment Document Rebracketing
- System errors

Work Pending E-mail Notifications

The possibility of providing a function that would generate e-mail notifications to system users of their work assignments has been discussed.

It is expected that regular users would receive an excessively large volume of messages if this function were implemented. It would probably be necessary to allow users to specify whether they wanted to receive no messages, a subset of generated messages, or all messages.

A report detailing work assignments by user has been added to the system requirements (see System Output Requirements section). Since this capability will allow users to easily check on their work assignments, there is no current requirement to implement the e-mail notification function.

Implementation Priorities

Most of the required system functionality will be implemented in Phase I of the development cycle. However, the system functions which generate the final Comment Response Document and associated indices have a lower implementation priority because they will not be used during the period in which comments are being accepted and processed. They will be developed in Phase II, which will run concurrent with the initial use of the system during the comment submission period.

Any additional functionality that can be identified as not being required during the initial period will also be given a lower priority and developed during Phase II.

Appendix A

EIS Comment/Response Database (CRD) Flow with Process Interfaces



