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Candidate Sites

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 26 1991

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

OSWER Directive 9345.1-08

MEMORANDUM

SUBJECT: Regional Quality Control Guidance for NPL Candidate Sites

FROM: Henry L. Longest II, Director
Office of Emergency and Remedial Response

TO: Director, Waste Management Division
Regions I, IV, V, VII, VIII

Director, Emergency and Remedial Response Division
Region II

Director, Hazardous Waste Management Division
Regions III, VI

Director, Toxic and Hazardous Waste Management Division
Region IX

Director, Hazardous Waste Division, Region X

Director, Environmental Services Division
Regions II, VI and X

PURPOSE: The purpose of this directive is to transmit "Regional Quality Control Guidance for NPL Candidate Sites" for use by regional EPA, State, and contractor personnel who prepare documentation records for hazardous waste sites proposed for placement on the National Priorities List.

BACKGROUND: EPA has developed a structured process to determine what, if any, cleanup actions are appropriate for the Federal government under the national Superfund program for sites included in the Comprehensive Environmental Response, Compensation and Liability System (CERCLIS), the Agency's national inventory of potential hazardous waste sites. This process has two distinct phases -- site assessment, which may lead to placement of sites on the National Priorities List (NPL), and the "remedial" planning phase which identifies the degree of problems at sites on the NPL and alternatives for correcting them. This guidance relates to the Hazard Ranking System (HRS) package preparation in the first phase -- site assessment.





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(for) Timothy Fields, Jr.

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EPA relies on the HRS to assess the relative threat associated with the release or potential release of hazardous substances from a waste site. The HRS score is the primary criterion EPA uses to determine whether a site should be placed on the NPL. Sites scoring 28.5 or above are eligible for listing. If a site scores 28.5 or above, an HRS package documenting that score is prepared and submitted to Headquarters by the Regions.

The package serves as the rationale for listing a site, and is meant to be open to public scrutiny. It therefore must be technically and legally defensible, as well as comprehensible to the lay person. For this reason, packages undergo extensive quality control review to ensure that the data are presented accurately and clearly, as well as referenced correctly.

This guidance provides procedural guidelines to promote national consistency in the quality of HRS packages. It reflects the input of Regional Site Assessment Section Chiefs and staff. This guidance is one aspect of a major TQM project to make the site assessment process more efficient and consistent. It complements the recently released Preliminary Assessment Guidance.

OBJECTIVE: All package preparers and reviewers in Superfund site assessment and listing efforts should follow the recommendations contained in this manual. The proper use of the quality control guidance should expedite the package preparation process and produce national consistency.

IMPLEMENTATION: Superfund site assessment personnel should immediately begin incorporating the QC guidance into ongoing package preparation. EPA will assist the Regions, States, and contractors in implementing this new guidance by supporting the ongoing evaluation of this guidance to refine procedural guidelines in the future.

If you need further information on QC Guidance, contact the Hazardous Site Evaluation Division, Robert Myers at (202) 260-3412, or June Wiaz at (202) 260-5745.

Attachments

cc: Director, Office of Solid Waste
Director, Hazardous Site Control Division
Director, Hazardous Site Evaluation Division
Director, Emergency Response Division
Director, Office of Enforcement

Publication 9345.1-08
December 1991

REGIONAL QUALITY CONTROL GUIDANCE FOR NPL CANDIDATE SITES

**Hazardous Site Evaluation Division
Office of Emergency and Remedial Response
Office of Solid Waste and Emergency Response
U.S. Environmental Protection Agency
Washington, DC 20460**

NOTICE

The procedures set forth in this document are intended as guidance to employees of the U.S. Environmental Protection Agency (EPA), States, and other government agencies. EPA officials may decide to follow the guidance provided in this directive, or to act at variance with it, based on analysis of specific site circumstances. EPA also reserves the right to modify this guidance at any time without public notice.

These guidelines do not constitute EPA rulemaking and cannot be relied upon to create any rights enforceable by any party in litigation with the United States.

Mention of company or product names in this document should not be considered as an endorsement by EPA.

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1.0 INTRODUCTION

This guidance manual provides recommended procedures for a Regional Quality Control (QC)¹ program for the evaluation of Hazard Ranking System (HRS) packages. HRS packages (including documentation records and references) are developed for sites evaluated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended in 1986 by the Superfund Amendments and Reauthorization Act (SARA), to support listing of sites on the National Priorities List (NPL). This guidance is to standardize Regional QC review and improve HRS package quality. The document is intended primarily for use by EPA Regional Offices. However, it also will serve anyone preparing or reviewing HRS packages, including EPA Headquarters, EPA contractors, and State agencies. The QC Manual also should complement other guidances (for conducting PA's and SI's, and applying the HRS) to assist Regions in the site listing process.

EPA has developed a structured process to determine what, if any, cleanup actions are appropriate for the Federal government under the national Superfund program for sites included in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), EPA's national inventory of potential hazardous waste sites. The process is in two distinct phases: the first phase, site assessment, may lead to proposal of sites for the NPL and consists of four activities — discovery, preliminary assessment, site inspection, and, if warranted, proposal to the NPL. The second or "remedial" planning phase involves detailed evaluation of a site to identify the precise magnitude and extent of problems at the site and alternatives for correcting them. This guidance document relates to the HRS package preparation in the first phase — site assessment.

The HRS is the scoring system EPA uses to assess the relative threat associated with the release or potential release of hazardous substances from a waste site. The HRS score is the primary criterion EPA uses to determine whether a site should be placed on the NPL; sites scoring 28.5 or above are eligible for listing. The NPL identifies sites that warrant further investigation to determine if they pose risks to public health or the environment.

Figure 1 summarizes the NPL rulemaking process. States, EPA Regional Offices, and EPA Headquarters evaluate all sites placed in CERCLIS to determine their eligibility for the NPL. If the site score is 28.5 or above, an HRS package documenting that score may be prepared and submitted to Headquarters by the Regions. EPA Regional Offices conduct a quality control review of HRS packages prior to Headquarters submittal for all candidate sites.

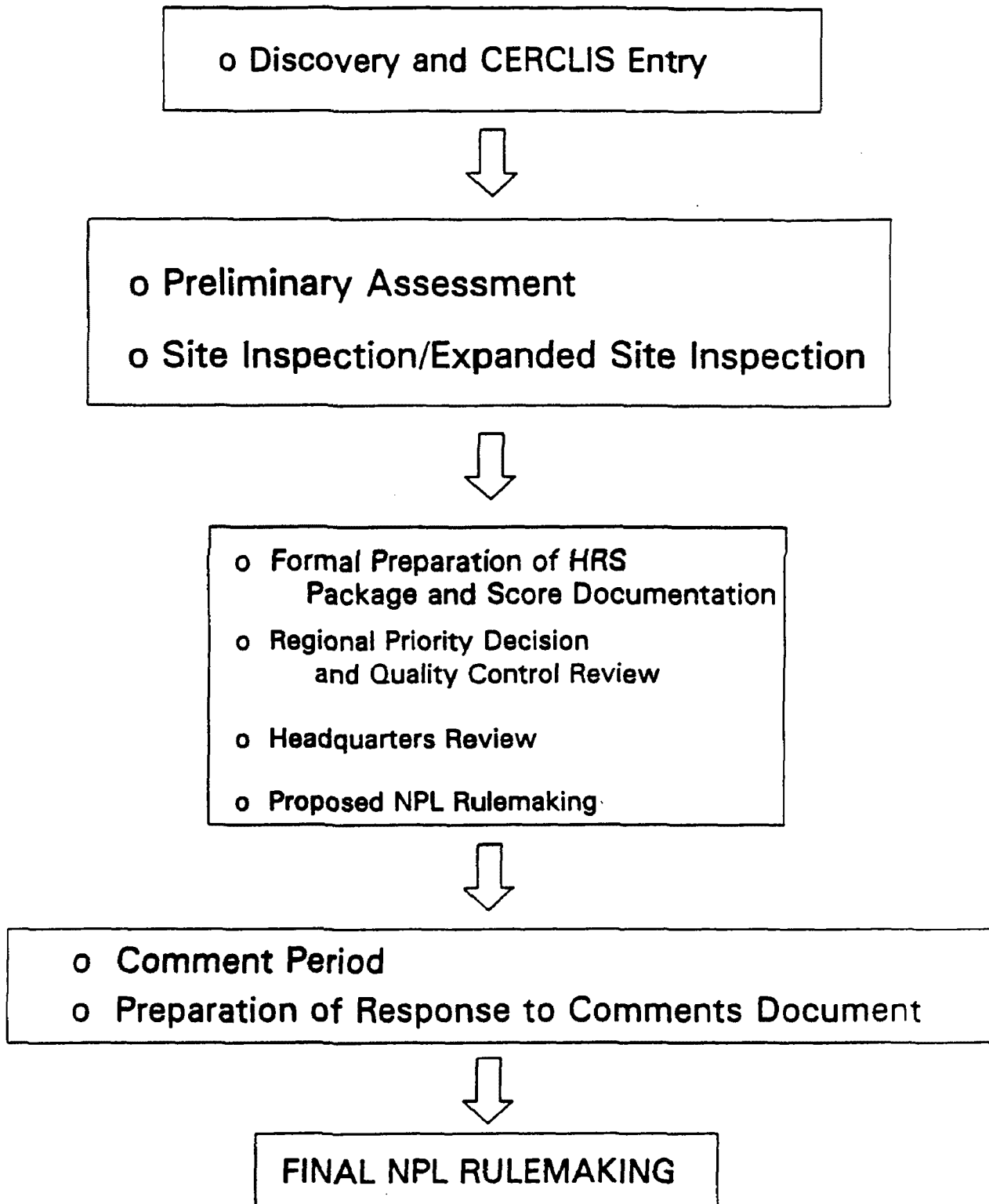
Once a package is received by EPA Headquarters, the overall responsibility for development of the NPL is assigned to the Site Assessment Branch (SAB) of the Hazardous Site Evaluation Division (HSED). SAB conducts quality assurance (QA) audits to ensure accuracy and consistency in HRS application among the EPA and State offices participating in scoring sites.

EPA follows informal rulemaking procedures to propose to the NPL the sites that meet listing criteria. The Agency publishes the proposal in the Federal Register and solicits public comment on the proposal. Based on these comments and further review by EPA, the Agency determines final HRS scores and places those sites that still qualify on the NPL.

¹The Site Assessment Branch (SAB) has defined QC as the series of checks performed at the Region, including evaluating a site package for site eligibility, completeness, appropriate documentation, mathematical accuracy, and typographical correctness. This is distinguishable from Quality Assurance (QA) which is the series of technical checks performed on site package after submission to Headquarters. QA for this purpose includes checking for consistency with precedent and HRS policy, confirming conclusions based upon data presented, and identifying technical HRS issues requiring further guidance.

Figure 1

The NPL Process



1.1 Eligibility Criteria

Certain types of sites are excluded from the NPL either by statute or policy. These eligibility issues are discussed in Section 2.1 of this manual.

The State, Regional, and Headquarters responsibilities during the determination of NPL eligibility are:

Summary of Responsibilities for Determining Eligibility

	<u>State/EPA Contractor</u>	<u>Region</u>	<u>Headquarters</u>
<u>NPL Eligibility Criteria and Policies</u>	Review NPL eligibility criteria and policies for applicability to candidate sites. Question data integrity when necessary. Provide necessary documentation.	Review NPL eligibility criteria and policies for applicability to candidate sites. Question data integrity when necessary. Provide necessary documentation.	Develop NPL eligibility policies, provide guidance on them, and ensure policies are interpreted correctly.

1.2 Development of HRS Packages

The Regions have the primary responsibility for screening sites that have been entered into CERCLIS, conducting technical assessments of the sites, computing HRS scores, and submitting NPL candidate sites to EPA Headquarters. The Regions may develop HRS packages for such sites or assign an EPA contractor to prepare the packages. States often play a major role in the process as well, identifying potential sites, investigating them, and developing and submitting HRS packages to the regional offices. The Regions should ensure these packages are developed and submitted on a continuous basis for sites that score 28.50 or above on the HRS.

Summary of Responsibilities for Package Development

	<u>State/EPA Contractor</u>	<u>Region</u>	<u>Headquarters</u>
<u>Package Development</u>	Prepare and submit HRS packages, including draft site summaries, to the Regions on a continuous basis.	Determine if site warrants package preparation; assist States and contractors as required (to develop packages, prepare site summaries, etc.). Ensure continuous rather than batch submittal.	Issue NPL/HRS guidance to the Regions (e.g. on HRS questions, documentation record format, scoring strategies, etc.).

1.3 Regional Review of HRS Packages

The Regions must conduct QC review of HRS packages developed by the States and EPA contractors before submitting them to SAB. The Regions have the sole responsibility to submit HRS packages to Headquarters. Headquarters will not accept any HRS package that has not completed Regional QC or that is not accompanied by a signed QC checklist (Figure 2). This includes any HRS package that has been sent directly to Headquarters by the State, an EPA contractor, or a Federal facility contractor without undergoing Regional QC review. Those packages will be returned to the sender.

An HRS package includes (in order):

- Narrative (site) summary
- Signed QC checklist
- QA Signature page (completed by EPA Headquarters)
- HRS score sheets (hard copy and disk; should be on PREScore)
- HRS documentation records, including bibliography of references (hard copy and disk -- on PREScore)
- NPL characterization data (hard copy and disk -- on PREScore) [See Appendix G.]
- Complete copies of referenced reports or documents
- Other information as appropriate (e.g. RCRA documentation, aggregation rationale).

Complete HRS packages and well-documented data are essential to proper HRS scoring and to reliable Regional QC checks. Regions should return incomplete HRS packages to the State or EPA contractor for revisions. Analysis of past listing proposals shows a high incidence of incorrect referencing and illegible photocopies (especially of maps) when packages have been submitted to headquarters. Limiting such errors will streamline QA review considerably, allowing more time and resources to be devoted to placing sites on the NPL.

Figure 2
HRS Package QC Checklist

- ____ 1. Review the site's eligibility for the NPL. Please consider each of the following special circumstances in your review and provide necessary documentation as appropriate.
- Petroleum Exclusion status
 - RCRA Status - adequate documentation required
 - Aggregation issues
 - Ground water plumes - likely sources identified
 - Other issues
- ____ 2. Check accuracy of math calculations for any factors not included in Prescore.
- ____ 3. Evaluate documentation as follows:
- ____ a. Verify that all the statements of fact or data have a reference with page numbers (primary sources should be used where available).
 - ____ b. Determine that full copies of all non-publicly available references are included and legible. Please note that the HRS preamble and rule are publicly available and therefore do not need to be included.
 - ____ c. Verify that the actual reference number appears on the reference itself.
 - ____ d. Ensure that all maps for each pathway are included and legible (all targets, samples, and sources should be identified on maps, and maps must be reproducible in black and white).
 - ____ e. Check that the list of references includes: title, author, date, affiliation, and page numbers (or total of pages if entire reference is included).
 - ____ f. Remove references not cited.
- ____ 4. Include narrative summary and NPL characterization data.
- ____ 5. Proofread for spelling and typographical errors.
- ____ 6. Ensure that this checklist is attached to 3 full copies of the HRS package and 2 copies of references (along with the diskette containing the scoresheet and documentation).

I certify that, to the best of my knowledge, the attached is a complete and accurate HRS package.

(EPA Regional Reviewer Signature)

(Date)

I certify that Region _____ requests _____ be evaluated for placement on the NPL.
(Site Name)

(EPA Regional Superfund Branch Chief Signature)

(Date)

(Typed name of Regional Superfund Branch Chief)

Summary of Responsibilities for Review of HRS Packages

The State, Regional, and Headquarters responsibilities during the Regional QC review of State and EPA contractor HRS package submissions are:

	<u>State/EPA Contractor</u>	<u>Region</u>	<u>Headquarters</u>
<u>Regional QC</u>	Work with Regions to resolve issues that arise during QC; correct errors and provide additional documentation as requested by Regions.	Perform QC of all HRS packages developed by States and EPA contractors.	Provide HRS guidance and training to the Regions and States as required; provide QC manual and short sheets if necessary on listing policy issues.
<u>Narrative Summaries</u>	Where appropriate, provide additional information, as requested by the Regions.	Review site summaries and site names and ensure consistency with Headquarters guidance.	Provide general guidance on site summaries and site names, and specific assistance to the Regions as required.
<u>Package Submission</u>		Submit to SAB three copies (plus disk) of the QC-approved HRS documentation record, and two copies of all references along with the signed QC checklist and other required materials. Develop plan to ensure prioritization and package submittal on a continuous basis. Identify sites and timetable for submittal.	Reject HRS packages not formally submitted by a Region, or not meeting QC requirements.

Regions conduct QC on a continuous basis as HRS packages are received from States and EPA contractors. The purpose of the Regional QC is to:

- Confirm the eligibility of a site for the NPL.
- Verify that the package is complete, information is accurate and readable, and every statement of fact is supported by documentation in the package.
- Check arithmetic not contained in PREScore.
- Ensure that scores for individual HRS factors are appropriate, given the information contained in the package.

- Identify assumptions made in the scoring and ensure they are adequately explained.
- Resolve and correct any errors or discrepancies.
- Review the site summary and NPL Characteristics Data Collection Form to ensure that they are adequate.

Regions must perform a strict QC to ensure that the documentation requirements are met. EPA's requirements have become more focused as a result of litigation and responding to public comments during previous NPL rules. If QC indicates that the HRS score is not accurate or that the documentation is incomplete, the State or EPA contractor must work with the Region to resolve any problems before the package is submitted to SAB for QA.

The Regional program office may want to coordinate review with the Office of Regional Counsel to prevent release of confidential information.

1.4 Regional Request for Headquarters Quality Assurance

Formal Headquarters QA of a candidate site will be initiated only when SAB receives the following documents:

- Completed QC checklist signed by the Regional NPL coordinator or other appropriate Regional reviewer, certifying the HRS package has undergone QC
- Regional Superfund Branch Chief's (or above) request for QA
- QC-approved HRS package (three copies plus disk and two copies of references), as specified in Section 1.3.

The use of the QC checklist is explained in Section 2.0 of this guidance. Regions should submit NPL (QC-approved) candidate packages for Headquarters QA as they are completed, rather than in groups. This ensures that packages are processed efficiently, Headquarters and Regional NPL workloads are evenly distributed throughout the year, and QA resources are allocated on an equitable basis. This is essential as rules will be sent to the Office of Management and Budget (OMB) on a fixed schedule, with two NPL proposed rules and two final rules each year at three-month intervals, regardless of the number of sites included in each rule.

1.5 Prioritizing Sites

The Regions have the sole responsibility for prioritizing sites for submission to Headquarters for QA review to ensure that Superfund addresses the worst sites first. Headquarters review will be based on each Region's priorities. The Region's prioritization of packages at Headquarters undergoing QA review may change as new sites are discovered and evaluated. The Region must inform Headquarters of changes in priorities.

Responsibility for ranking sites for both initial screening and formal NPL submittal to Headquarters falls to the EPA regional offices. In addition to the HRS evaluation, the Regions may use other criteria to establish the order in which packages are prepared. Priorities may shift somewhat from strictly numerical rankings depending on qualitative factors, such as the type of remedial activity which may be needed; the quality of the data; whether there are observed releases at the site; and the degree of community or congressional concern about the site.

1.6 Headquarters Procedures

Headquarters does a completeness check for all required items once it receives three copies of the HRS package. If the package is not complete, it is returned to the Region. Assuming the package is complete, two copies are sent to the contractor and the other kept at Headquarters for concurrent review. Subsequent package revisions and additional references added as a result of technical issues raised during QA review should be sent directly to the contractor and not to Headquarters. All policy concerns should be directed to Headquarters. If, based on technical or other factors, a submitted site is withdrawn from QA review, all information is returned to the Region and the site is removed from the list of NPL candidate sites. Any change in status should be reflected in CERCLIS.

The contractor typically will prepare a QA letter, addressing all technical issues, within three weeks of receiving the HRS documentation record for a one-pathway site. The QA reviewer may take one more week for each additional pathway that is scored. Regions and their States or contractors will then respond to the letter and provide necessary information. Once issues are resolved and Headquarters determines that a site should be proposed to the NPL, a cover sheet is prepared and signed by both the Headquarters SAB Regional Coordinator and the SAB Branch Chief.

Headquarters compiles a proposed rule from all the QA-approved packages available just prior to the time of the scheduled OMB submittals (February 28 and August 30). Proposals will not be delayed in order to complete the QA review of a specific site. Such a site will be evaluated for the next proposal.

The preamble and proposed rule provide background on the NPL, identify the specific sites being proposed, and list those having policy considerations (such as sites being listed even though subject to RCRA corrective action). Federal facilities are specifically identified. Concurrence is needed through the Assistant Administrator for OSWER and by OGC before the preamble and rule can be formally submitted to OMB. The concurrence process generally takes up to two weeks. Following concurrence but before actual submittal to OMB, the EPA Headquarters Office of Federal Facilities Enforcement will inform the headquarters office of the affected federal agency, and the EPA Region will notify the designated point-of-contact at the facility itself. Federal facilities receive this treatment because they are seen as "sister" agencies to EPA, unlike non-Federal PRPs.

After OMB review, any additional changes resulting from that review are made and concurrence through the Assistant Administrator is again required. Once the preamble and proposed rule are signed, the Regional NPL coordinators are notified, and background information and narrative summaries are provided to them. In addition, SAB coordinates with the Headquarters press office, the Congressional Affairs office (to notify interested members of Congress), the Superfund community relations office, and the Office of Federal Facilities Enforcement. The Agency for Toxic Substances and Disease Registry, which must perform a health assessment on each proposed site within a year, is also notified. A press release is issued approximately four days after signature, and publication in the Federal Register occurs one or two days after the press release. The publication date marks the formal beginning of the 60 day comment period. Following publication, the Regional Information Management Coordinators are notified to make necessary changes to CERCLIS.

During the OMB and concurrence process, when the list of sites in the rule is agreed to, Headquarters makes two copies of each signed package included in a rule; the original will go into the Headquarters docket, one copy will be sent to the Regional docket, and one copy will be sent to the Regional NPL coordinator. The Regional coordinators will receive their copies after OMB clears the proposed rule so that there will be sufficient time to make copies before the rule is published in the Federal Register. The Regional docket copy will be sent out following signature of the rule by EPA's Assistant Administrator. All dockets must be set up at the time the rule is published in the Federal Register. The Regional dockets must provide all references; the Headquarters docket contains only the HRS documentation record and no references.

2.0 USING THE QC CHECKLIST

The QC checklist (Figure 2) is intended to aid the regional reviewer in determining whether an HRS package meets basic QC requirements. The following pages discuss the QC checklist, in order.

2.1 Evaluate Site's Eligibility

An important factor to determine before submitting an HRS package to SAB for formal review is whether the site is appropriate for the NPL, based on statutory or listing policy considerations. For example, CERCLA restricts EPA's authority to respond to certain categories of releases by excluding some substances, such as petroleum, from the response program. Also, as a matter of policy, EPA has chosen not to list sites, such as certain Resource Conservation and Recovery Act (RCRA) facilities, where other authorities exist that can address the contamination. In determining whether the site should be listed on the NPL, consider the following factors:

- Petroleum exclusion status
- RCRA status
- Aggregation issues
- Ground water plumes -- likely sources identified
- Other factors (less common issues such as Nuclear Regulatory Commission deferrals and certain statutory exclusions).

2.1.1 Petroleum Exclusion²

The CERCLA petroleum exclusion was discussed in a memorandum dated July 31, 1987, from Francis S. Blake, General Counsel, to J. Winston Porter, then Assistant Administrator for the Office of Solid Waste and Emergency Response (This memorandum is included as Appendix A). The exclusion, contained in CERCLA Sections 101(14) and (33), excludes from the definition of "hazardous substance" petroleum, including crude oil and any fractions thereof (if the fraction is not a specifically listed or designated hazardous substance), natural gas, natural gas liquids, liquified natural gas, and synthetic gas usable for fuel (but not fractions thereof).

There is no definition of petroleum in CERCLA. Crude petroleum includes a number of hazardous substances that would otherwise be CERCLA hazardous substances, such as benzene, toluene, xylenes, and ethylbenzene. In their pure forms, they remain hazardous substances and can be scored. When they are a part of petroleum or petroleum products, they cannot be used in scoring.

The OGC guidance presents several major points:

- 1) The petroleum exclusion also covers any hazardous substances which are normally mixed with or added to crude oil or crude oil fractions during the refining process (e.g., lead in leaded gasoline). A refined product, such as gasoline, remains within the exclusion even if the refining process increases the concentration of hazardous constituents above natural levels. However, if

²Note: EPA currently is reviewing recent legislation to determine if that legislation has any impact on the petroleum exclusion. If the review indicates changes are necessary, the Agency will provide a short sheet to substitute for this guidance.

the concentration of hazardous constituents is increased after a product leaves the refinery, the exclusion may not apply. Therefore, if in a release, levels of hazardous constituents are found at concentrations greater than would be typical of crude oil or refined petroleum fractions, the release may be eligible for listing. However, this is very difficult to show, given the variability of concentrations of these constituents in petroleum products.

- 2) Releases of petroleum contaminated with hazardous substances (i.e., mixed with hazardous substances outside the refining process) prior to disposal can be listed if the petroleum and hazardous substances cannot be separated. An example is used oil which has been contaminated with metals or PCB's during use. This is true even when the metal comes from a source such as leaded gasoline that was itself within the petroleum exclusion.
- 3) If two distinct plumes commingle, one of petroleum and one of a hazardous substance which can be listed, the release can be listed but only the non-petroleum plume can be used in the HRS scoring (for waste quantity, observed release, etc.).
- 4) Any fraction of petroleum or crude oil that is specifically listed or designated as a hazardous substance under RCRA or other Federal laws enumerated in CERCLA Section 101(14) does not fall within the petroleum exclusion. Examples would be the RCRA K048-K052 wastes, such as leaded tank bottoms, slop oil emulsion wastes and API separator sludge.
- 5) Unadulterated waste oil is not a CERCLA hazardous substance. However, if waste oil is mixed with a hazardous constituent outside the standard refining process, and they are so commingled that they cannot be separated, the entire mixture can be used in HRS scoring.

Please note that although petroleum itself cannot be used for determining toxicity, waste quantity, or an observed release, if it is mixed with non-excluded products containing the same hazardous substances as are inherent in petroleum, these hazardous substances may be used for scoring. Also, a petroleum release can be used to show aquifer interconnection.

For more details on the petroleum and natural gas exclusions, please contact the Site Assessment Branch.

2.1.2 RCRA Status

The NPL/RCRA policy provides that generally sites should not be placed on the NPL if they can be addressed under RCRA Subtitle C corrective action authorities. According to the NPL/RCRA policies published June 10, 1986 (51 FR 21057), June 24, 1988 (53 FR 23978), and October 4, 1989 (54 FR 41000), facilities that are subject to RCRA Subtitle C may be listed on the NPL when corrective action is unlikely to succeed or occur promptly, as in the following situations:

- Inability to Finance -- The facility is owned by persons who are unable to pay (as evidenced by their invocation of the bankruptcy laws and documented by a bankruptcy petition).
- Unwillingness/Loss of Authorization to Operate -- Facilities that have lost authorization to operate or for which there are indications that the owner/operator has been unwilling to undertake corrective action.

- Unwillingness/Case-by-Case Determination -- Facilities that have a clear history of unwillingness as determined on a case-by-case basis.³
- Converters -- Facilities that at one time were treating or storing RCRA Subtitle C hazardous waste but have since converted to generator-only status (i.e., facilities that now store hazardous waste for 90 days or less), or any other hazardous waste activity for which interim status is not required. (Include documentation that the withdrawal of Part A applications for these facilities has been acknowledged by the State or EPA.)
- Non- or Late Filers -- Facilities that were treating, storing or disposing of hazardous waste on or after November 19, 1980 but did not submit a Notification of Hazardous Waste Activity by the date prescribed in Section 3010(a) (usually August 18, 1980), did not file Part A of a permit application by the date prescribed in 40 CFR 270.10 (usually November 19, 1980) and have little or no history of RCRA compliance. (If facility is a late filer, include documentation that permit was late.)
- Pre-HSWA Permittees -- Received a RCRA subtitle C operating permit before November 8, 1984 (before passage of the Hazardous and Solid Waste Amendments of 1984), and the owner/operator will not voluntarily modify the permit to incorporate corrective action requirements. Include a copy of the permit for documentation.

Sites in the converter or late or non-filer categories may be addressed under RCRA and not CERCLA if they agree to implement corrective action under a RCRA consent order (October 4, 1989, 54 FR 41005).

Sites subject to Subtitle C corrective action and not in any of these categories may be considered for the NPL if EPA determines on a site-specific basis that the contamination is more appropriately addressed under CERCLA, as was done with the Fairchild Semiconductor Corp. plant in Mountain View, California (February 11 1991, 56 FR 5602).

In addition, sites not subject to Subtitle C corrective action authority are listed on the NPL if they are otherwise eligible. Following are examples of sites that fall into this category:

- Facilities that ceased treating, storing or disposing of hazardous waste prior to November 19, 1980 (the effective date of Phase I of the Subtitle C regulations).
- Sites at which only materials exempted from the statutory or regulatory definition of solid waste or hazardous waste are managed.
- RCRA hazardous waste handlers to which RCRA Subtitle C corrective action authorities do not apply, such as hazardous waste generators, transporters, or protective filers not required to have Interim Status or a final RCRA permit.

Regions and Regional contractors should contact the Site Assessment Branch for more details or refer to the following Federal Register notices discussing the policy:

51 FR 21054 (June 10, 1986)
 53 FR 23978 (June 24, 1988)
 53 FR 30002 (August 9, 1988)
 54 FR 10520 (March 13, 1989)
 54 FR 41000 (October 4, 1989)

³Note: For both categories of "unwillingness," owners or operators of facilities may be judged unwilling if they fail to comply adequately with an administrative order, judicial action, or consent decree, or a RCRA permit condition requiring response or corrective action. (See 53 FR 30006, August 9, 1988 for a more detailed discussion of types of non-compliance that constitute unwillingness.)

2.1.3 Aggregation Issues

For NPL purposes, the Agency has decided that in most cases sites should be scored individually because HRS scores more accurately reflect the relative priority given to the site if the site is scored alone. However, in some cases the nature of the operation that created the release⁴ or the nature of the probable appropriate response may indicate that two or more noncontiguous releases should be treated as one site for NPL purposes. Deciding how or if to aggregate these releases has been a recurring issue under the original HRS, and will continue to be of concern under the revised HRS. The ultimate decision must be made on a site-specific basis.

CERCLA Section 104(d)(4) states where "two or more noncontiguous facilities are reasonably related on the basis of geography, or on the basis of the threat, or potential threat to the public health or welfare or the environment, [EPA] may in [its] discretion, treat these related facilities as one for purposes of [response authorities]."

The following factors may be used among others in determining if two or more sites should be aggregated. (The aggregation policy is stated in 49 FR 37076, included as Appendix B.)

- Are the releases part of the same operation or unit? If so, the substances deposited and the means of disposal are likely to be similar, which may imply that a single strategy for cleanup is appropriate. In addition, potentially responsible parties would generally be the same for the releases, indicating that enforcement or cost recovery efforts could be very similar and might be consolidated.
- Is contamination from the releases threatening the same media (for example, the same part of the ground water or surface water body)?
- How far apart are the noncontiguous releases and are the target populations essentially the same or substantially overlapping?

Not all of these factors must be met in order to aggregate releases, but all factors should be evaluated. Where the evaluation of factors indicates that two noncontiguous releases should be addressed as a single site, the releases will be listed as a single site for NPL purposes.

A recent court decision on the Sangamo Weston site affirms the Agency's application of the aggregation policy. The Sangamo Weston plant manufactured electrical equipment, and Sangamo disposed of wastes on the property and released effluents into unnamed tributaries of Town Creek that originated on the property. Town Creek in turn flows into Twelve Mile Creek, which flows into Lake Hartwell. In addition, Sangamo disposed of wastes at various landfills in the area. The Agency calculated an HRS score for the Sangamo plant that exceeded 28.5, then aggregated the plant and five private landfills located along Twelve Mile Creek or its tributaries into a single site. However, EPA specifically excluded several municipal landfills from the aggregated site because they would have involved many other parties and types of waste.

In this case, the plaintiff contended that EPA's own policy required the agency to find each of the factors listed in the aggregation policy (49 FR 37076). However, the court upheld EPA's use of the aggregation policy, saying that the policy contains only a non-exhaustive list of factors to be considered, and that all factors do not have to be present in each case.

⁴Note that the NPL interchangeably refers to "releases," "facilities," and "sites" (56 FR 35841).

Federal facilities are often listed on an aggregated basis. Such facilities are often very large and encompass multiple potential sources of contamination arising out of a variety of different activities. When the Agency lists a variety of unrelated sources at a federal facility as one site, it is in effect utilizing the aggregation policy. The most important factor that makes aggregation appropriate in such cases is generally the presence of a single responsible party which will serve as lead agency for any response and with whom EPA would have to enter into an Inter-Agency Agreement.

Additional guidance questions should be addressed to SAB. Should further guidance be necessary, SAB will consider a more detailed short sheet.

2.1.4 Ground Water Plumes - Likely Sources Identified

Although it may not be possible to conclusively identify sources, the equivalent of an expanded site inspection should be performed to demonstrate CERCLA can address the site and provide the remedial program with information to make source identification easier. This information also will enhance the accuracy of scoring data. Where several sources are known, the HRS documentation record generally should be prepared based on those sources, not based on a general plume of unknown source. For more information on ground water plumes, see the Hazard Ranking System (HRS) Guidance Manual (in preparation), OSWER Dir. 9345.1-07.

2.1.5 Other Issues

There are several other listing policy and statutory exclusions that package preparers and Regional reviewers need to be aware of prior to making NPL decisions. If the following type of situation exists, you should check with SAB to ensure further evaluation is appropriate:

- Radioactive materials - CERCLA section 101(22) excludes a limited category of radioactive materials from the statutory definition of "release," making them ineligible for CERCLA response or the NPL. These are (1) releases of source, by-product, or special nuclear material from a nuclear incident if these releases are subject to financial protection requirements under Section 170 of the Atomic Energy Act, and (2) any release of source, by-product, or special nuclear material from any processing site specifically designated under the Uranium Mill Tailings Radiation Control Act of 1978. Such releases are unlikely to be present at many CERCLA sites. In addition, as a policy matter, EPA has chosen not to list releases of source, by-product, or special nuclear material from any facility with a current license issued by the Nuclear Regulatory Commission (NRC). Regions should check if a site appears likely to have NRC involvement. Note that this exclusion under CERCLA is much narrower than the general exclusion of radionuclides from the definition of solid waste under RCRA.
- Under CERCLA section 104(a)(3), EPA's authority to respond to the following releases is limited to emergencies: 1) of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes, from a location where it is naturally found, 2) from products which are part of the structure of, and result in exposure within, residential buildings or business or community structures, or 3) into public or private drinking water supplies due to deterioration of the system through ordinary use.
- CERCLA precludes EPA from recovering response costs for federally permitted releases (Section 107(j)). These releases, however, are eligible for the NPL.

- CERCLA precludes EPA from recovering response costs for contamination resulting from the proper application of a pesticide product registered under the Federal Insecticide, Fungicide and Rodenticide Act (Section 107(i)). This does not by itself preclude NPL listing. EPA currently is examining whether such releases should be included on the NPL, as is the case with spills, leaks, and improper disposal, or addressed in other ways.

(Note that no supplementary information is necessary for municipal landfill sites.)

The vehicle for resolving these and any other site issues is the Issue Submittal Form (Appendix C). The Region, State, or field contractor may fill out the form -- which asks for a description and status of the site, as well as the specific issue to be resolved. The NPL Coordinator then submits the form to a Review Team if he or she deems it appropriate. After the Review Team deliberation, the resolution is drafted, circulated for comment among its members, and revised accordingly. The SAB Review Team Coordinator then provides the Region with the results.

2.2 Check Factor Values for Accuracy by Using HRS Tables

Each value assigned in the HRS documentation package is a value derived from one of the tables in the HRS. Ensure that the tables used are clearly identified and that the correct values are assigned from the tables. If a value has been assumed as allowed by the HRS (e.g. minimum value for hazardous waste quantity or the default value for toxicity), state this information and reference the HRS.

EXAMPLE:

Hazardous Waste Quantity Value = 569.25
Therefore, Table 2-6 (Ref. n, cite final HRS) assigns a
Hazardous Waste Quantity Factor Value of 100.

TO CHECK:

Compare the assigned value of 100 to the value found in Table 2-6.

**TABLE 2-6
HAZARDOUS WASTE QUANTITY
FACTOR VALUES**

<u>Hazardous Waste Quantity Value</u>	<u>Assigned Value</u>
0	0
1 to 100	1
Greater than 100 to 10,000	100
Greater than 10,000 to 1,000,000	10,000
Greater than 1,000,000	1,000,000

2.3 Check Math for Completeness and Accuracy

For any calculations separate from PRescore (such as those used to determine constituent quantity), the regional QC reviewer should confirm that these calculations are present and complete and that the math used in these calculations is correct.

EXAMPLE:

Population within 1/4 mile of the Site:

Six homes are on private wells within a 1/4 mile radius of the site. (Ref. a, p. x) Census data indicate there are 3.0 persons per household in this area. (Ref. b, p. y) In addition, one municipal well within 1/4 mile of the site services 100 connections. (Ref. c, p. z)

INCOMPLETE:

Total population = 318

COMPLETE:

6 homes X 3.0 persons/home = 18

100 connections X 3.0 persons/home = 300

Total population = 318

2.4 Evaluate Documentation

2.4.1 Verify That All Data or Statements of Fact Are Accurately Described and Referenced

Every statement of fact in the HRS documentation record that is beyond general knowledge should be supported with a reference number and page number next to each statement (not at the end of the paragraph or at the bottom of the page).

Example:

Approximately 2 tons per week of chromium sludge from the All-Rite Chemical Company were deposited into the landfill for a period of 6 years. (Ref. a, pp. b-d)

Finding a particular sample in a large collection of data may take considerable effort. Thus, sample data should be identified by location and collection date and specific sample numbers should be cited in the documentation record. Numbering all pages in large (unpaginated) data sets also should be done for easier access to the data and to save valuable review time.

When referencing target measurements, describe where the measurement began (e.g. at a sampling location); where the measurement ended (e.g. Well #4 at a referenced location); and how the measurement was made (e.g. from a topographic map included in the references). This description should enable the public to repeat each step of the measurement and verify the supporting information in the references, if desired.

In addition, ensure that primary sources are used as references, if at all possible. Primary references are the original materials in which the information was given. Examples of primary sources are:

- Geological publications
- Field observations/measurements
- Analytical results
- Waste manifests.

Examples of references which can be used but are not considered primary references are:

- Allegations of buried drums
- Estimates of the depths of landfills or lagoons
- Summaries of analytical results without actual laboratory data
- SI reports.

Although these references are acceptable, primary sources are preferred where available. (Note particularly that commenters are increasingly questioning laboratory procedures so that documentation by the laboratory that it followed proper analysis procedures is advisable.)

Examine carefully the use of PA and SI reports for references. Other than actual field observations or measurements and the sample results themselves, these reports may contain a large amount of second-hand information. Ensure that the actual documents referenced within the PA and SI reports are used as the primary references within the HRS reference package.

2.4.2 Determine That Full Copies of All Non-Publicly Available Documents Are Included⁵

Ensure that legible copies of all documents in the reference package that are not routinely available to the public are present in their entirety (not merely excerpted). Below are examples of publicly available documents and those not considered to be publicly available.

ROUTINELY PUBLICLY AVAILABLE	NOT PUBLICLY AVAILABLE
<ul style="list-style-type: none"> ● HRS Preamble and Rule ● Geological Publications Reports ● Chemical Handbooks 	<ul style="list-style-type: none"> ● PA/SI Reports ● Consultant Reports ● Phone Logs

⁵A related issue is the "releasability" of documents prepared in the site assessment process. Documents that are not protected under the Freedom of Information Act (FOIA) have been declared "releasable." Documents deemed "deliberative" need not be released by the Agency. See Section 4.0 for more information on what types of documents should or can be made available to the public. Direct questions about FOIA requests to the Office of Regional Counsel or the Headquarters Site Assessment Branch.

When referencing publicly available documents, the reference should include the title page and table of contents from the document, and the full chapter or section that is cited and not merely the page or paragraph. Geological publications often present conflicting information or contain important caveats. The summary or conclusion of the report should always be used to support a judgment call such as discontinuities or interconnections. This is less important if the reference is being used for strictly factual information, such as a log.

All of the references and their pagination must be legible. Readability of map photocopies is an especially common problem.

2.4.3 Ensure That All Pertinent Maps Are Included for Each Pathway Scored

All maps that are referenced in the HRS documentation record must be included in the reference package. There may be many different types of maps throughout the reference package. All of them should be as complete as possible (e.g. showing which aquifer(s) underlies the target distances). A map may be located within a report in the references or it may be the actual reference. In either case the following information should be included somewhere within the reference package:

- Maps showing the target distances (e.g.)
 - A 4-mile radius map
 - A 15-mile surface water pathway map.
- Maps showing population calculations, with dwellings being counted if possible, and the target distance in which they appear clearly identified. It should be clear how the population values for each of the target distance rings were determined.
- Maps showing pertinent sample locations, with respect to the sources, if possible.
- Maps showing municipal well and surface water intake locations and the distance rings in which they appear.
- A site sketch showing all sources, surrounding structures and topographic features which might affect the likelihood and direction of migration pathway from the source.
- Maps showing pertinent distance factors (e.g. distance to nearest home well, distance to nearest surface water body, etc.).
- Geologic maps.

Because the maps in the references will be copied, they should not be color coded. Symbols and keys on the maps should be clearly understood in black and white. Take care to ensure that the maps contain the maximum amount of necessary information, without causing confusion. In addition, the package preparer should consider including 8½" x 11" map reductions in the beginning of the documentation record to make QA review easier.

Appendix D includes guidance on the specifications of maps used for HRS purposes. Although regional resources may preclude providing all the information recommended, adhering to the guidelines in Appendix D will greatly reduce QA review time, as well as the number of iterations among the Region, its contractor and the Headquarters review team.

2.4.4 List of Reference Materials

The reference list, which appears at the beginning of the HRS documentation record, identifies materials supporting EPA's position in proposing or finalizing a site to the NPL. The reference list should represent the sources of information used to document the entries on the HRS documentation record. The HRS package must include copies of appropriate portions of all references cited in the documentation record.

References should be numbered sequentially as they appear in the HRS documentation record. Exceptions include the following:

- List the HRS itself as reference 1. (U.S. Environmental Protection Agency Hazard Ranking System, 40 CFR Part 300, Appendix A, 55 FR 51583 December 14, 1990)
- List the Superfund Chemical Data Matrix (SCDM) as Reference 2. This matrix is the database for properties and benchmarks of hazardous substances. Because EPA periodically updates it, include its date. (U.S. Environmental Protection Agency, 1991 Superfund Chemical Data Matrix (SCDM). May 10.)

Include legible copies of the relevant portions of references plus title pages in the documentation record. Widely-available documents such as those listed above need not be included. The basic elements of a reference include:

- Full name(s) of author(s).
- Publication date, including year, month and day, if available.
- Titles of articles, journals, chapters, and books.
- Other items such as volume and page number; conference sponsor, location and date; book publisher and principal city; report number, and contractor who prepared the report; etc.

2.4.5 Check References and Bibliography

Although there are various styles for the list of references, each entry should consist of the same basic information. The following are some common bibliographic forms.

1. Reports/Books - Author. Affiliation. Title. Volume Number, Date, Pages
Ex. Brown, William. U. S. Department of Agriculture. Soil Survey of Hometown, Pennsylvania. Volume 3, 1986. 20 pages.
2. Topo. Maps - Author, Name of Quadrangle, Series, Title. Date, including photorevisions. (Describe any additional information added to the map and source).
Ex. U. S. Geological Survey, East Greenville, Pennsylvania Quadrangle, 7.5 Minute Series. Topographic Map. 1957, photorevised 1969 and 1973. (Four-mile radius added by NUS FIT 3).
3. Memos, phone logs, meetings - From/With Name, Title, Affiliation, with/to Name, Title, Affiliation. Type of correspondence/correspondence. Date. Number of pages.

- Ex. Little, Janet, Operations Supervisor, Towanda Water and Sewer Authority to Jane Doe, Site Investigation Officer, U.S. Environmental Protection Agency. Telecon. January 15, 1989. 1 page.
- Ex. Little, Janet, Operations Supervisor, Towanda Water and Sewer Authority to Jane Doe, Site Investigation Officer, U.S. Environmental Protection Agency. Memo. Well Logs, November 1988. January 15, 1989. 2 pages.
4. Site Inspection Reports - Author. Title. TDD Number (if applicable). Date. Number of pages.
- Ex. NUS Corporation, FIT 3. Site Inspection of Mooney Landfill. TDD No. F3-8804-14. November 7, 1988. 150 pages.

Compare the information (i.e., date, author, title, company, etc.) in the bibliographic entry to that on the reference to verify accuracy. Verify page numbers (or total number of pages, if entire reference is included). Ensure all information is legible. If a reference is undated, do not use the date of sampling or the site visit; rather, indicate that it is undated. Ensure that the reference number appears on the reference itself, not just on the divider in front of the reference, in case there are many references and the divider and reference it relates to become separated. Also, when citing several references at once, use a semi-colon to separate individual references and a comma to set off the reference number from the page number (e.g. Reference 6, p. 4; 34, pp. 4, 8, 9-12; and 40, p. 4).

2.4.6 Remove References Not Cited

HRS packages can go through several revisions from the time they are sent to SAB for the initial review until a final decision is made. Often, the QA review will result in adding or deleting references. Work with the EPA Headquarters QA reviewer to ensure that each reference listed in the bibliography is actually cited in the HRS package. Likewise, the citations in the package should correspond to the reference itself.

2.4.7 Additional Considerations

- All telephone logs and memos to the file that are included as references should be legible, signed and dated.
- Do not use draft references, if possible. However, a draft document may be used if it is known that there have been no changes in policy since it was issued.
- Do not use confidential material as references. If an HRS value (e.g. waste quantity) is documented in a reference that contains confidential information, it may be possible to summarize the HRS information desired, eliminate any confidential information, and present the summary as a new reference. If possible, the person who provided the original information should provide the summarized information. If this approach is not possible, contact the Regional attorneys and if necessary, SAB to resolve the issue.
- Do not use a dot matrix printer to produce the final documentation record. Photocopies of dot matrix originals are difficult to read.

2.5 Include Site Summary/NPL Characterization Form

Site summaries are important components in HRS packages. They are widely distributed to familiarize Congress, the press, and the general public with the sites that are proposed for the NPL. Include site summaries

with the HRS packages when they are first sent to EPA Headquarters for review. Guidelines for preparing site summaries are included as Appendix E. No packages will be reviewed until an acceptable site summary is provided.

The Regions also need to carefully select site names before they are proposed for the NPL. Headquarters generally does not change names between proposal and finalization because of the public confusion that results from such action. Guidelines for naming NPL sites are included as Appendix F.

A completed NPL Characteristics Data Collection Form (Appendix G) also must be included in the HRS submittal.

2.6 Proofread

Read through the entire documentation package to screen for spelling and typographical errors. Although this process may seem unnecessarily tedious, the result will be a better quality package and will save EPA Headquarters considerable review time. In addition, a small typographical error can result in major difficulties (e.g. ppm instead of ppb identified for sample results). Summary tables should be proofed to ensure that they agree with the original data sheets.

2.7 Assemble the Complete HRS Package

Once the final QC review is complete, the reviewer will sign and date the QC checklist. Additionally, the Branch Chief (or above) will sign to formally request QA of the package. Completion of the check list and signatures is mandatory before Headquarters QA will begin.

The Region will send three hard copies of the documentation record and two copies of the references to EPA Headquarters. One set of references and two of the documentation record will go to the EPA contractor for review (after a Headquarters QC check) and another copy will be kept at EPA Headquarters. Be sure to include the diskettes for PREScore and the documentation record as well.

3.0 ADDITIONAL RECOMMENDATIONS FOR CONDUCTING QC

The **checklist** discussed in the preceding section is mandatory and requires a signature. However, there are other **considerations**, generally optional, that are strongly recommended as they will provide a framework that promotes consistency and efficiency. Regions should feel free to adopt additional criteria or procedures or modify the recommendations outlined below, considering the time and resources available.

3.1 Technical Considerations

By following the four recommendations outlined below, the regional QC reviewer can improve the technical adequacy of an HRS package.

3.1.1 Check the Entire Package to Ensure that There Are No Conflicting or Ambiguous References

A commenter could cite conflicting references as an example of how inconsistent the information is that EPA used to score the site and raise questions as to why one reference is right and the other is wrong. Examples of conflicting references:

- One reference says that ground water in the aquifer of concern is found at 135 feet below ground surface (bgs) while another says 147 feet bgs. If both references are crucial to the package and need to be cited for different pieces of information, then the HRS documentation record should explain why one number is more appropriate than the other (more recent, site specific vs. general, etc.). If both references are not required, use only one. This example is applicable to situations involving specific data that could be obtained through some sort of field work or study.
- A reference might state that a former employee alleged illegal hazardous waste disposal at a site, whereas the site owner specifically refutes the allegation in his or her statement required under CERCLA Section 104(e). How reliable are the sources of information? A disgruntled employee, or one involved with a health benefits claim could have an ulterior motive (as could the site owner). This example is applicable to situations where the information cited would be difficult to check by field work. Weigh carefully the importance of using the information and whether it is realistic (i.e. allegations that 100,000 drums were disposed in a pit that could not physically contain that many drums).

Ambiguous references are those that do not document exactly the information cited in the HRS documentation record and require some interpretation or extrapolation. A commenter often cites ambiguous references and puts the burden of proof on EPA to explain the reference or to obtain new references to support the HRS information. Because it is often difficult or impossible to obtain new information, try to avoid ambiguous references. Examples of ambiguous references include:

- A reference might imply that two aquifers are hydraulically connected without stating categorically that they are and without evidence to support the claim. Unless a reasonable technical case can be made to justify the interpretation, avoid this type of ambiguous reference.
- A reference used to support human food chain production for the surface water pathway gives general production values for a larger or smaller area than that specified by the target distance limit. If no other specific information is available and extrapolation is required, then the HRS documentation record should explain the technical basis for the calculations and why they are appropriate for that piece of information.

As a general rule, use conflicting or ambiguous references only if they are absolutely necessary. If they are used, then the HRS documentation record should explain the validity and appropriateness of using those particular references. If this is not done initially, it will be required as part of the QA review.

3.1.2 Examine and Calculate Various Scoring Scenarios

Before submitting a site to headquarters, consider different scoring scenarios for the site, from an extremely low score to a high-score interpretation of the site-specific facts and the HRS rule. Clearly explain any assumptions used in the scoring process. This will identify the weak portions of the scoring package and provide regional management the information necessary to make a decision whether to propose the site or gather more data.

If a site scores over the NPL cut-off even after all the questionable items have been removed, then the package will obviously be easier to support in the response to comment phase of the listing process. A regional QC reviewer may decide that a good case can be made for a high-score interpretation, and seek to convince the Headquarters QA team that the high score is supportable. In this case, the regional QC reviewer should identify scoring interpretations to the QA team as soon as QA begins.

Ultimately, the QC reviewer must decide prior to QA which scoring scenario will be used and what work is required to support the score. Regions may choose to use the conservative approach that still yields scores above the cut-off if resources are minimal to conduct QA and response to comments. The liberal approach should only be used if the risks associated with the approach are identified, accepted by the region, and are legally supportable. A regional QC reviewer should check with SAB or Headquarters legal staff to determine the viability of the scoring approach prior to expending a high level of effort to prepare the package.

3.1.3 Check the HRS Package for Logical Progression of Analysis

Since the HRS package is the basis for the EPA decision to prepare a site for the NPL and is the legal document that EPA might have to defend in court, it must be constructed in such a way as to build upon the information being presented. Repetition of key facts throughout the documentation record is one way to develop a logical progression.

A brief examination of the HRS rule and documentation record will highlight the progression of the information used to develop a score. First, the source(s) is identified and characterized. Next, an observed release or potential to release associated with the source(s) is documented. Then waste characteristics for the source(s) are calculated. Finally, targets within the pathway specific distance limits as measured from the source(s) are geographically located and characterized for level of exposure. By adding on to the information presented in each previous section, the facts are strung together to present a more complete analysis of how the site is scored using the HRS. A general example of how this might be done is as follows:

Source: The source is a pit located in the middle of the facility (Ref. map) where hazardous substances such as toluene, carbon tetrachloride, and PCB were deposited from 1965-1980 (Ref. process description and historical operational period). When sampled on 2/9/90, soil samples (Sample #'s) from boreholes in the pit had significantly elevated concentrations of PCB when compared to a background borehole sample (Sample #) taken at the same time (Ref. analytical results with specific reference to the actual sample used).

Observed Release: Carbon tetrachloride and PCB were detected in ground water samples taken on 2/10/90 at significantly elevated levels when compared to background samples taken the same day (Ref. analytical results)(See Table 1, which should show sample numbers for both the field and lab as well as sample quantitation method. Page number with references are essential here.). These are the same hazardous substances that were disposed in the pit (Ref. process and history). PCB also was detected in borehole samples taken from the pit (Ref. analytical results).

Waste Characteristics: Toluene and carbon tetrachloride (Ref. process and history) and PCB (ref. analytical results) are the hazardous substances associated with the pit and have toxicity/mobility/persistence/etc. values of xx, yy, and zz (Ref. HRS rule and chemical database). The volume of the pit has been calculated at 1,000 cubic yards based on aerial photos and historical records (Ref. photos and records and perhaps a calculation sheet detailing any assumptions made).

Targets: X number of people are within the following distance rings from the pit (Ref. topo map and population data) which had significantly elevated levels of PCB (ref. analytical results). Y number of people are exposed to Level I concentrations of PCB (Ref. analytical results, population data, toxicity, benchmark, and map).

As the example shows, repeating the facts in each new section lays the groundwork for adding the new piece of information. While this might appear cumbersome, it actually clarifies and strengthens the HRS analysis and documentation record.

3.1.4 Avoid Incomplete Data and Unexplained Methodologies

Some common examples of data shortfalls are: the number of residential vs. commercial customers; where water in the system blends with water from other sources; the relative contribution of surface and ground water supplies; depth to well screening, pumping rates, water for other-than-drinking purposes; and standing well pumping schedules.

Unexplained methodologies involve instances where, for example, a table shows target results for three different distance rings, but the only reference, a map, depicts only one ring. Another example: the methodology for converting census tract (or zip code) information (usually presented for annular geometric areas) into target population data (presented for annular rings) is not elaborated upon.

3.1.5 Remember: The General Public Must Be Able to Understand the Documentation Record

Along with maintaining a logical progression of the HRS analysis, the regional QC reviewer should remember that the HRS package is a public document that the general public needs to understand in order to formulate an opinion on the EPA listing proposal. Thus, the documentation record must be comprehensible to the lay person who may not have a technical background and is unfamiliar with the terminology that is commonly used within the Superfund program. Spell out all acronyms, avoid technical jargon and use easy-to-understand terms that convey the general idea behind the technical subject. Be consistent. For example, avoid switching between unit measurements such as ppb and ug/L, when presenting analytical data. In addition, when presenting more than one piece of information, such as an observed release, use consistent tables that are easy to read.

3.2 Procedural Considerations

The two procedures that are described below can have important impacts on regional resource allocation and have significant effects on how quickly QC occurs. Every effort should be made to adopt the procedures or a regional variation.

3.2.1 Provide Feedback to the HRS Package Preparer

Some regional QC reviewers will be familiar with a site by reviewing the PA/SI preliminary HRS score and already will have provided critical direction and comment on the rough score. Usually this is done informally, such as by telephone. In other Regions, the QC reviewer will not have had the opportunity to become acquainted with the site. Regardless of which of the above situations actually occurs in each Region, it is extremely important that a formal feedback loop be instituted between package preparer and QC reviewer.

One easy-to-use approach is the HRS QC Checklist described in Section 2. The QC reviewer could check each item for adequacy and prepare written comments on any deficient items, thus alerting the package preparer to those items that need follow-up work and resubmission. This process would be reiterated until all items are properly corrected and/or revised according to the QC reviewer's specifications. This approach will only cover the minimum components of the HRS package and may not highlight all of the problems with a package.

Another approach would be to use a combination of the QC Checklist and PREScore to provide a more thorough analysis of each HRS factor. The QC reviewer could provide, after reviewing the hardcopy or the PREScore file, specific comments on every HRS factor that requires revision or clarification. The documentation record would then be transmitted back to the package preparer and the reiterative process continued until all of the requested changes and revisions are incorporated. Where changes are not extensive and the reviewer is sufficiently familiar with the package, a memo or phone call may suffice.

3.2.2 Institute a Peer Review Process

To help prioritize sites for NPL submittal and QA review as well as ensure technical quality, the Regions may opt to use some form of peer review process. A peer review group could rank sites prior to full HRS package preparation in addition to reviewing the package after the QC reviewer.

Membership in the peer review group is at the discretion of Regional management. In addition to site assessment staff, it could include program management, Superfund remedial project managers, Superfund On-Scene Coordinators, technical staff (e.g. a hydrogeologist, toxicologist, chemist, etc.), and possibly representatives of non-Superfund EPA programs such as Air, Water, and Toxic Substances where appropriate. In addition, some Regions may choose to involve State personnel.

The peer review group may want to consider whether the package is "bullet-proof." The peer review group should critique the package and question the technical accuracy of the score and interpretations. The QC reviewer should be able to defend the package successfully as if it had gone through the public comment process.

Following peer group review, the HRS package can be transmitted to Headquarters. A peer review group is an important step in the QC process to provide a check point for sites that are being considered for the NPL.

The above discussion has highlighted for the QC reviewer additional steps beyond the QC Checklist that can be adopted regionally to improve the selection and content of an HRS package. These suggestions can be tailored to regional specifications, and additional procedures can be adopted. The extra effort that a Region expends during the QC process is almost always returned in the form of quicker QA and response to public comments.

4.0 INFORMATION RELEASE POLICY

The Office of General Counsel (OGC) has prepared guidance outlining the Agency's policy regarding the releasability of HRS information (see Appendix H). This OGC memorandum addresses the extent to which materials prepared in the site assessment process may be withheld as "deliberative" in response to FOIA requests. The OGC guidance is summarized in general terms as follows:

- Materials underlying a "no further remedial action planned" (NFRAP) decision are releasable.
- Draft HRS scoring sheets may be withheld.
- For sites that are under consideration for the NPL, but not yet proposed, the HRS scoring sheets, documentation record, and factual material need not be disclosed.
- HRS scores for RCRA deferral sites may be withheld.

The OGC guidance addresses our legal obligations, while pointing out that the Agency has the flexibility to release documents which we may legally withhold. However, it is Agency policy not to release these documents unless we are required to do so.

This guidance should answer many of the FOIA-related questions that the Regions have. Note that the advice given here is general in nature, and in specific cases it is advisable to consult a Regional or OGC FOIA attorney.

**APPENDIX A: SCOPE OF THE CERCLA
PETROLEUM EXCLUSION UNDER
SECTIONS 101(14) and 104(a)(2)**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D C 20460

JUL 31 1987

OFFICE OF
GENERAL COUNSEL

MEMORANDUM

SUBJECT: Scope of the CERCLA Petroleum Exclusion Under
Sections 101(14) and 104(a)(2)

FROM: Francis S. Blake *F.S. Blake*
General Counsel (LE-130)

TO: J. Winston Porter
Assistant Administrator
for Solid Waste and Emergency Response (WH-562A)

One critical and recurring issue arising in the context of Superfund response activities has been the scope of the petroleum exclusion under CERCLA. Specifically, you have asked whether used oil which is contaminated by hazardous substances is considered "petroleum" under CERCLA and thus excluded from CERCLA response authority and liability unless specifically listed under RCRA or some other statute. For the reasons discussed below, we believe that the contaminants present in used oil or any other petroleum substance are not within the petroleum exclusion. "Contaminants", as discussed below, are substances not normally found in refined petroleum fractions or present at levels which exceed those normally found in such fractions. If these contaminants are CERCLA hazardous substances, they are subject to CERCLA response authority and liability.

Background

Under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 as amended (CERCLA), governmental response authority, release notification requirements, and liability are largely tied to a release of a "hazardous substance." Section 104 authorizes government response to releases or threatened releases of hazardous substances, or "pollutants or contaminants." Similarly, liability for response costs and damages under Section 107 attaches to persons who generate, transport or

dispose of hazardous substances at a site from which there is a release or threatened release of such substances. Under Section 103, a release of a reportable quantity of a hazardous substance triggers notification to the National Response Center.

The term "hazardous substance" is defined under CERCLA Section 101(14) to include approximately 714 toxic substances listed under four other environmental statutes, including RCRA. Both the definition of hazardous substance and the definition of "pollutant or contaminant" under Section 104(a)(2) exclude "petroleum, including crude oil or any fraction thereof", unless specifically listed under those statutes. ^{1/} Accordingly, no petroleum substance, including used oil, can be a "hazardous substance" except to the extent it is listed as a hazardous waste under RCRA or under one of the other statutes. Thus two critical issues in assessing whether a substance is subject to CERCLA is whether or not, and to what extent, a substance is "petroleum." This memorandum discusses the second type of petroleum exclusion issue. The question, therefore, is not whether used oil is "petroleum" and thus exempted from CERCLA jurisdiction, but to what extent substances found in used oil which are not found in crude oil or refined petroleum fractions are also "petroleum". If such substances are not "petroleum" then a release of used oil containing such substances may trigger CERCLA response actions, not to the release of used oil, but to the contaminants present in the oil.

1/ The full texts of these provisions are as follows:

Section 101(14)

The term [hazardous substance] does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

Section 104 (a)(2)

The term [pollutant or contaminant] does not include petroleum, including crude oil and any fraction thereof which is not otherwise specifically listed or designated as hazardous substances under section 101(14)(A) through (F) of this title, nor does it include natural gas, liquefied natural gas, or synthetic gas of pipeline quality (or mixtures of natural gas and such synthetic gas).

Although the term "hazardous substance" is defined by statute, there is no CERCLA definition of "petroleum" and very little direct legislative history explaining the purpose or intended scope of this exclusion. None of the four early Superfund bills originally excluded responses to oil, although the apparent precursor to Section 101(14), found in S. 1480, excluded "petroleum" without explanation in all versions except that introduced. The legislative debates on the final compromise indicate only that Congress intended to enact later, separate superfund-type legislation to cover "oil spills." See generally 126 Cong. Rec. H11793-11802 (December 3, 1980).

Since the enactment of CERCLA, the Agency has provided some interpretations of the nature and scope of the petroleum exclusion. In providing guidance in 1981 on the notification required under Section 103 for non-RCRA hazardous waste sites the Agency stated that petroleum wastes, including waste oil, which are not specifically listed under RCRA are excluded from the definition of "hazardous substance" under 101(14). 46 Fed. Reg. 22145 (April 15, 1981). 2/

In 1982 and in 1983, the General Counsel issued two opinions on the CERCLA petroleum exclusion. In the first opinion, the General Counsel distinguished under the petroleum exclusion between hazardous substances which are inherent in petroleum, such as benzene, and hazardous substances which are added to or mixed with petroleum products. The General Counsel concluded that the petroleum exclusion includes those hazardous substances which are inherent in petroleum but not those added to or mixed with petroleum products. Thus, the exclusion of diesel oil as "petroleum" includes its hazardous substance constituents, such as benzene and toluene, but PCB's mixed with oil would not be excluded. Moreover, if the petroleum product and an added hazardous substance are so commingled that, as a practical matter, they cannot be separated, then the entire oil spill is subject to CERCLA response authority.

In the second opinion, the General Counsel concluded that the petroleum exclusion as applied to crude oil "fractions" includes blended gasoline as well as raw gasoline, even though refined or blended gasoline contains higher levels of hazardous

2/ In the notice the Agency used the term "waste oil" without stating whether it was intended to include all waste oil or only unadulterated waste oil. The Agency has subsequently interpreted the reference to "waste oil" in this notice to include only unadulterated waste oil. 50 Fed. Reg. 13460 (April 4, 1985).

substances. The increased level of hazardous substances results from the blending of raw gasoline with other petroleum fractions to increase its octane levels. Because virtually all gasoline which leaves the refinery is blended gasoline, the petroleum exclusion would include virtually none of this fraction if the increased concentration of hazardous substances due only to its processing made it subject to CERCLA.

Finally, the Agency has interpreted the petroleum exclusion in two recent Federal Register notices. In the April 4, 1985 final rule adjusting reportable quantities under Section 102, the Agency provided its general interpretation of the exclusion:

EPA interprets the petroleum exclusion to apply to materials such as crude oil, petroleum feedstocks, and refined petroleum products, even if a specifically listed or designated hazardous substance is present in such products. However, EPA does not consider materials such as waste oil to which listed CERCLA substances have been added to be within the petroleum exclusion. Similarly, pesticides are not within the petroleum exclusion, even though the active ingredients of the pesticide may be contained in a petroleum distillate: when an RQ of a listed pesticide is released, the release must be reported.

50 Fed. Reg. 13460 (April 4, 1985).

In March 10, 1986, the Agency published a notice of data availability and request for comments on the proposed used oil listing under RCRA. 51 Fed. Reg. 8206. In that notice, the Agency responded to commenters who had argued that the RCRA listing would discourage used oil recycling because it would subject generators, transporters, processors, and users to Superfund liability. The Agency stated that used oil which contains hazardous substances at levels which exceed those normally found in petroleum are currently subject to CERCLA. 51 Fed. Reg. 8206 (March 10, 1986). Although the fact that the used oil is contaminated does not remove it from the protection of the petroleum exclusion, the contaminants in the used oil are subject to CERCLA response authority if they are hazardous substances. Accordingly, most used oil, even without a specific listing, would not be fully within the petroleum exclusion, irrespective of the listing.

Discussion

Because there is no definition of "petroleum" in CERCLA or any legislative history which clearly expresses the intended scope of this exclusion, there are several possible interpretations which could be given to this provision. However, we believe that our current interpretation, under which "petroleum" includes hazardous substances normally found in refined petroleum fractions but does not include either hazardous substances found at levels which exceed those normally found in such fractions or substances not normally found in such fractions, is most consistent with the statute and the relevant legislative history. Under this interpretation, the source of the contamination, whether intentional addition of hazardous substances to the petroleum or addition of hazardous substances by use of the petroleum, is not relevant to the applicability of the petroleum exclusion. The remainder of this memorandum explains in greater detail this interpretation and its legal basis, and responds to arguments raised in opposition to this interpretation.

The following is our interpretation of "petroleum" under CERCLA 101(14) and 104(a)(2), which we believe to be consistent with Congressional intent and the position which the Agency has taken on the scope of the petroleum exclusion thus far. First, we interpret this provision to exclude from CERCLA response and liability crude oil and fractions of crude oil, including the hazardous substances, such as benzene, which are indigenous to those petroleum substances. Because these hazardous substances are found naturally in all crude oil and its fractions, they must be included in the term "petroleum," for that provision to have any meaning.

Secondly, "petroleum" under CERCLA also includes hazardous substances which are normally mixed with or added to crude oil or crude oil fractions during the refining process. This includes hazardous substances the levels of which are increased during refining. These substances are also part of "petroleum" since their addition is part of the normal oil separation and processing operations at a refinery in order to produce the product commonly understood to be "petroleum."

Finally, hazardous substances which are added to petroleum or which increase in concentration solely as a result of contamination of the petroleum during use are not part of the "petroleum" and thus are not excluded from CERCLA under the

exclusion. ^{3/} In such cases, EPA may respond to releases of the added hazardous substance, but not the oil itself.

We believe that an interpretation of "petroleum" to include only indigenous, refinery-added hazardous substances is the interpretation of this provision which is most consistent with Congressional intent. The language of the provision, its explanation in the legislative history, and the Congressional debates on the final Superfund bill clearly indicate that Congress had no intention of shielding from Superfund response and liability hazardous substances merely because they are added, intentionally or by use, to petroleum products.

The language of the petroleum exclusion describes "petroleum" principally in terms of crude oil and crude oil fractions. This language is virtually identical to the language used in an earlier Superfund bill to define "oil." ^{4/} There is no indication in the statute or legislative history that the term "petroleum" was to be given any meaning other than its ordinary, everyday meaning. See Malat v. Riddell, 383 U.S. 569, 571 (1966) (words of a statute should be interpreted where possible in their ordinary, everyday sense). Petroleum is defined in a standard dictionary as

^{3/} The mixing of two or more excluded petroleum substances, such as blending of fuels, would not be considered contamination by use, and the mixture would thus also be an excluded substance.

^{4/} See H.R. 85, 96th Cong., 2d Sess. §101(s) (as passed by the House, September 1980) ("Oil" means petroleum, including crude oil or any fraction or residue therefrom). H.R. 85 was designed principally to provide compensation and assess liability for oil tanker spills in navigable waters. As discussed below, the omission of this "oil spill" coverage under the petroleum exclusion was believed to be the most significant omission in terms of response to environmental releases under the final Superfund bill.

Although the bill containing the precursor to Section 101(14), S. 1480, does not have a definition of "petroleum", its accompanying report did explain the term "petroleum oil" in the context of the taxing provisions:

The term "petroleum oil" as used in subsection 5 means petroleum, including crude petroleum and any of its fractions or residues other than carbon black.

S. Rep. No. 96-848, 96th Cong., 2d Sess. 70 (1980).

an oily flammable bituminous liquid that may vary from almost colorless to black, occurs in many places in the upper strata of the earth, is a complex mixture of hydrocarbons with small amounts of other substances, and is prepared for use as gasoline, naphtha, or other products by various refining processes.

Webster's Ninth New Collegiate Dictionary 880 (1985). Thus, an interpretation of the phrase "petroleum, including crude oil or any fraction thereof" to include only crude oil, crude oil fractions, and refined petroleum fractions is consistent with the plain language of the statute. 5/

The only legislative history which specifically discusses this provision states that

petroleum, including crude oil and including fractions of crude oil which are not otherwise specifically listed or designated as hazardous substances under subparagraphs (A) through (F) of the definition, is excluded from the definition of a hazardous substance. The reported bill does not cover spills or other releases strictly of oil.

S. Rep. No. 96-848, 96th Cong., 2d Sess. 29-30 (1980) (emphasis added). Thus, the petroleum exclusion is explained as an exclusion from CERCLA for spills or releases only of oil. The legislative history clearly contemplates that the petroleum

5/ This distinction under the exclusion in Title I of CERCLA between petroleum as the substance that leaves the refinery and the hazardous substances which are added to it prior to, during or after use was also made by Congress in Title II, the revenue provisions of CERCLA. In Title II, Congress made a distinction between "chemicals", petrochemical feedstocks and inorganic substances, taxed in Subchapter B of Chapter 38 of Internal Revenue Code, and "petroleum", crude oil and petroleum products, taxed in Subchapter A. Section 211 of CERCLA. The list of taxed chemicals includes many of the contaminant hazardous substances typically found in used oil: arsenic, cadmium, chromium, lead oxide, and mercury. The term "petroleum products" was explained in the legislative history as including essentially crude oil and its refined fractions. H. Rep. No. 96-172, Part III, 96th Cong., 2d Sess. 5 (1980) (to accompany H.R. 85).

exclusion will not apply to mixtures of petroleum and other toxic materials since these would not be releases "strictly of oil".

The Congressional debates on the final compromise Superfund legislation provides further clarification of Congressional intent concerning the scope of the petroleum exclusion, both in terms of what this provision deleted from the bill and what it did not. First, the major concern expressed with respect to the final compromise bill was the omission of its oil spill jurisdiction due to the petroleum exclusion. See e.g. 126 Cong. Rec. H11737 (Rep. Florio) (daily ed. December 3, 1980); id. at H11790 (Rep. Broyhill); id. at H11792 (Rep. Madigan); id. at H11793 (Rep. Studds); id. at H11795 (Rep. Biaggi); id. at H11796 (Rep. Snyder). This omission was of concern because it was believed to leave coastal areas and fisheries vulnerable to tanker spills of crude and refined oil, such as the wreck of the Argo Merchant, and offshore oil well accidents. 126 Cong. Rec. H11793 (Rep. Studds) (daily ed. December 3, 1980). See also 126 Cong. Rec. S10578 (proposed amendment to S1480 by Sen. Magnuson) (daily ed. August 1, 1980); id. at S10845 (proposed amendment to S1480 by Sen. Gravel) (daily ed. August 5, 1980). The omitted coverage of oil spills was believed to include approximately 500 spills per year, 126 Cong. Rec. H11796 (Rep. Snyder) (daily ed. December 3, 1980), far less than the number of contaminated oil releases each year.

However, it was clear that the omission of oil coverage was intended to include spills of oil only, and there was no intent to exclude from the bill mixtures of oil and hazardous substances. The remarks of Rep. Mikulski are typical of the general understanding of the effect of the petroleum exclusion in the final bill:

The Senate bill is substantially similar to the House measure, with the exception that there is no oil title.

I realize that it is disappointing to see no oil-related provision in the bill, but we must also realize that this is our only chance to get hazardous waste dump site cleanup legislation enacted. . . .

Moreover, there is already a mechanism in place that is designed to deal with spills in navigable waterways. There is not, however, any provision currently in our law that addresses the potentially ruinous situation of abandoned toxic dump sites.

I, therefore, believe that it is imperative that we pass the Senate bill as a very important beginning in our attempt to defuse the ticking environmental time bomb of abandoned toxic waste sites.

Id. at H11796.

In addition, several speakers specifically identified such mixtures as releases not only covered by the legislation but releases to which the bill was addressed.

Mr. Edgar . . .

In my State, hazardous substances problems have been discovered at an alarming rate in recent years. In the summer of 1979, an oil slick appeared on the Susquehanna River near Pittston, Pa. When EPA officials responded under section 311 of the Clean Water Act, they learned that the slick contained a variety of highly poisonous chemicals in addition to the oil.

Officials estimate that more than 300,000 gallons of acids, cyanide compounds, industrial solvents, waste oil and other chemicals remain at this site where they could be washed to the surface anywhere in a 10-square - mile surface.

Id. at H11798. See also 126 Cong. Rec. S14963 (daily ed. November 24, 1980) (Sen. Randolph) (contaminated oil slick). Other petroleum products containing hazardous substance additives intended to be addressed by the legislation include PCB's in transformer fluid, id. at S14963 (Sen. Randolph) and S14967 (Sen. Stafford), dioxin in motor fuel used as a dust suppressant, id. at S14974 (Sen. Mitchell), PCB's in waste oil, id. (Sen. Mitchell) 6/ and contaminated waste oil, id. at S14980 (Sen. Cohen). Accordingly, Congress understood the petroleum exclusion to remove from CERCLA jurisdiction spills only of oil, not releases of hazardous substances mixed with the oil.

There are two principal arguments which have been raised in opposition to this interpretation. First, the argument has been made that this interpretation narrows the petroleum exclusion to the extent that it has become virtually meaningless. As we have noted in previous opinions on this issue, an interpretation which emasculates a provision of a statute is strongly disfavored. Marsano v. Laird, 412 F.2d 65, 70 (2d Cir. 1969). However, this interpretation leaves a significant number of petroleum spills outside the reach of CERCLA. Spills or releases of gasoline remain excluded from CERCLA under the petroleum exclusion. As indicated by the legislative history for the 1984 underground storage tank

6/ The illegal disposal of PCB's in North Carolina described by Senator Mitchell was a result of the spraying of 131,000 gallons of PCB-contaminated waste oil along a roadway. See 126 Cong. Rec. H9448 (daily ed. September 23, 1980).

legislation, leakage of gasoline from underground tanks appears to be the greatest source of groundwater contamination in the United States. 130 Cong. Rec. S201-2028 (daily ed. February 29, 1984) (Sen. Durenberger). In addition, spills of crude or refined petroleum are not subject to Superfund, as was frequently noted prior to its passage. See generally 126 Cong. Rec. H11786-H11802 (daily ed. December 5, 1980). Moreover, under this interpretation not all releases of used oil will be subject to CERCLA since used oil does not necessarily contain non-indigenous hazardous substances or hazardous substances in elevated levels. 7/ Although used oil is generally "contaminated" by definition, see e.g., RCRA Section 1005 (36), the impurities added by use may not be CERCLA hazardous substances.

A second argument which has been made opposing this interpretation is that Congress intended to include in the term "petroleum" all hazardous substances added through normal use of the petroleum substance. However, even if it were possible to determine in a response situation whether a hazardous substance was added intentionally or only through normal use or to determine what additions are "intentional", the legislative history is contrary to such a distinction. As noted above, the Senate Report explaining this provision states that it excludes releases or spills strictly of oil. This explanation expresses Congressional intent that releases of mixtures of oil and toxic chemicals, i.e. releases which are not strictly of oil, would be subject to CERCLA response authority. Releases of contaminated oil even if contaminated due to "normal use" are not releases strictly of oil.

Furthermore, the Congressional debates prior to passage clearly indicate an intent that contaminated oil would be subject to Superfund as several such releases were discussed

as the focus of the legislation. Congress was concerned with the environmental and health effect of abandoned toxic waste sites, not whether the presence of such hazards was intentional or due to normal practices. In fact, one of the petroleum-hazardous substance mixtures most often mentioned during the debates was that of PCB contaminated oil, which is a type of contamination arguably resulting from the "normal use" of the oil in transformers. Accordingly, an interpretation of the petroleum exclusion which includes as "petroleum" hazardous substances added during use of the petroleum would not be consistent with Congressional intent.

7/ Data submitted to EPA by the Utility Solid Waste Activities Group et al. in Appendix C of their comments on the RCRA Used Oil listing, February 11, 1986.

Finally, although the Superfund Amendments and Reauthorization Act of 1986 (SARA) contains several provisions related to oil and oil releases, it did not amend the petroleum exclusion under CERCLA. Moreover, the new provisions concerning oil and oil releases and their legislative history do not indicate a Congressional intent inconsistent with this opinion.

The only discussion of "petroleum" in the Conference Report for SARA is in the context of defining the scope of the new petroleum response fund for leaking underground storage tanks under Subtitle I of the Resource Conservation and Recovery Act (RCRA). Subtitle I defines "petroleum" in a manner nearly identical to CERCLA. The Conference Report specifies that used oil would be subject to the response fund notwithstanding its contamination with hazardous substances. H. Rep. No. 99-362, 99th Cong., 2d Sess. 228 (1986). The Conference Report is not inconsistent with the Agency's position on "petroleum" under CERCLA since it merely specifies that the leaking underground storage tank (UST) response fund is applicable to tanks containing certain mixtures of oil and hazardous substances, as well as to tanks containing uncontaminated petroleum. In fact, the Report further states that the UST response fund must cover releases of used oil from tanks since "releases from tanks containing used oil would not rise to the priority necessary...for CERCLA response", id. (emphasis added), not because such releases would be entirely excluded from CERCLA jurisdiction. See also 132 Cong. Rec. S14928 (daily ed. October 3, 1986) (Senator Chaffee) (Nothing in Section 114, pertaining to liability for releases of recycled oil, "shall affect or impair the authority of the President to take a response action pursuant to Section 104 or 106 of CERCLA with respect to any release...of used oil or recycled oil"); 132 Cong. Rec. H9611 (daily ed. October 8, 1986) (Rep. Schneider) ("...the oil companies are rightfully assessed a significant share of the Superfund tax...Waste oils laced with contaminants have been identified at at least 153 Superfund sites in 32 States.").

**APPENDIX B: AGGREGATION POLICY
FEDERAL REGISTER NOTICE**

Sites Which Are Difficult to Address

One commenter said that "unbounded or unmanageable sites, such as well fields" should not be included on the NPL. In response, EPA believes that unless a remedial investigation and feasibility study has been completed at a site, it is not possible to specify whether a site presents a manageable problem. Furthermore, at many of those sites where commonly applied remedial actions are infeasible, some response actions short of waste removal or source controls, e.g., providing alternative water supplies, may be appropriate. EPA believes that the technologies for response actions have been developing rapidly; a response which was infeasible in the past may become feasible in the near future. Finally, with the case specifically mentioned, wellfields, the Agency has generally found the need for CERCLA response particularly acute since this generally involves contamination of public water supplies. Hence, EPA has not attempted to exclude sites which are especially difficult to address through current response technologies.

Noncontiguous Facilities

Section 104(d)(4) of CERCLA authorizes the Federal government to treat two or more noncontiguous facilities as one for purposes of response, if such facilities are reasonably related on the basis of geography or their potential threat to public health, welfare, or the environment. As previously stated (48 FR 65058, September 8, 1983), for purposes of the NPL, EPA has decided that in most cases such sites should be scored and listed individually because the HRS scores more accurately reflect the conditions at the sites if each is scored individually. In other cases, however, the nature of the operation that created the sites and, possibly, the nature of the appropriate response may indicate that two geographically separate properties should be treated as one site for purposes of listing. EPA has done so for some sites previously listed separately on the NPL.

Factors relevant to such a determination may include whether the two or more areas were operated as parts of a single unit. Another factor is whether contamination from the two or more sites is threatening the same part of an aquifer or surface water body. Finally, EPA will also consider the distance between the noncontiguous sites and whether the target population (i.e., within 3 miles) is essentially the same or substantially overlapping for the sites.

One commenter, Governor Bond of Missouri, submitted the 33 known dioxin sites in that State as a single site on the NPL. Using characteristics from various sites, he assigned a single HRS score to the 33 sites. Governor Bond maintained that the dioxin was produced by a single waste generator and that the sites had a common method of disposal. According to the Governor, by treating the sites individually EPA has complicated negotiations for health studies, development of cost recovery suits, and the State's accounting procedures.

EPA carefully considered the Governor's proposal and, taking into account the factors discussed above, decided that his reasons did not warrant consolidating the 33 sites into a single site. The sites are dispersed over a wide area of the State and affect different target populations. The 33 sites generally comprised different disposal operations rather than parts of the same facility. Many of the 33 sites would not individually score high enough to be on the NPL and, thus, the overall score for the 33 sites would be misleading. EPA has also concluded that listing the 33 sites as a single site on the NPL is not a prerequisite for developing a consolidated response strategy for the Missouri dioxin sites. Many of these sites may qualify for Fund-financed removal actions. The Agency is currently evaluating ways of coordinating possible response strategies at these sites to alleviate the problems which Governor Bond has identified.

Another commenter expressed the view that any grouping of noncontiguous sites would be inappropriate. EPA disagrees. In some instances the property boundaries or other factors commonly used to define a site may not be very useful or reasonable for determining if a problem involves one site or several. One example is the Minker/Stout/Romaine Creek site in Missouri where dioxin contaminated soils were used as fill in several yards in a residential neighborhood. Even though the contaminated areas are not contiguous and the properties involved have several different owners, the Agency determined that the site was really a single operation, that the same target populations might be affected, and that there is no logic to support treating the various areas as separate sites. Given the many factors involved in making such determinations and the differing importance that each factor may take on in various situations, the Agency must weigh each situation individually to determine if

noncontiguous disposal areas are a single site or several.

Where EPA determines, based on the above considerations, that two or more noncontiguous locations are most logically considered as a single site, they will appear as a single site on the NPL. While the listing suggests prospective response actions, it does not prescribe them: EPA may decide that response efforts should be distinct and separate for the two locations. Also, EPA may decide to respond to several sites listed separately on the NPL with a single response if it appears cost-effective to do so.

Scoring of Air Releases

A comment was received concerning how past air releases are scored. Language in the preamble to the final NCP caused a commenter on the Bayou Sorrell, Louisiana site to question whether past air releases may properly be included in a site's HRS score. This issue is discussed in detail in the "Support Document for the revised National Priorities List—1984" for the Bayou Sorrell site. However, the main points of this issue are presented in the following discussion.

EPA believes that past air releases are included in a site's HRS score. The HRS stipulates that a site is to be scored for an air release if data "show levels of a contaminants at or in the vicinity of the facility that significantly exceed background levels, regardless of the frequency of the occurrence (47 FR 31236). According to the HRS as established in the NCP revisions, therefore, the single evidence of an air release such as that which occurred at Bayou Sorrell, requires that the site be scored as having an observed release to air. This approach to scoring has been clarified by EPA's stated policy that sites are to be scored on the basis of conditions existing before any remedial measures were performed. This policy was clearly stated at the time of promulgation of the NCP revisions (47 FR 31188), and EPA considers it to be firmly established as part of the HRS. In addition, the Agency has attempted to clarify further the reasons for this policy in subsequent statements (48 FR 40864-5).

Several considerations underlie the policy. Actions by States to conduct or enforce cleanup might be discouraged if partial cleanup of a site could reduce the score such that the site would not be eligible for the NPL.

Another concern is that responsible parties might be encouraged to conduct minimal, incomplete cleanup actions at sites that might reduce the HRS score

APPENDIX C: ISSUE SUBMITTAL FORM

APPENDIX C

ISSUE SUBMITTAL FORM

Site Information	
Name: _____	Region: _____
Location: _____	
EPA ID#: _____	
Status: _____	

Dates	
Issue Submitted to HQ:	_____
Review Team Discussed:	_____
Resolution communicated to Region:	_____

Contact Information (including phone numbers)
Issue Submitted by: _____
SAB Headquarters Regional Coordinator: _____
MITRE Regional QA: _____
Regional Contact: _____

Issue:

INSTRUCTIONS FOR ISSUE SUBMITTAL FORM AND PROCEDURE FOR RESOLUTION DISTRIBUTION

1. Complete all blanks in the "Site Information" box. In the "status" blank, give some indication of where the site is in the package preparation process (e.g., being prepared for Update #, in Regional package preparation, in QA review). Indicate on the Status line any deadlines for the site that will not be met until the issue is resolved.
2. Complete only the first blank in the "Dates" box.
3. Complete all known information in the "Contacts" box. Phone numbers are important because the Review Team may contact the listed individuals for more explanation of the issues.
4. Carefully complete the "issue" box. Because Review Team members are not likely to be familiar with the site, give enough information about the site so that the issue is clear. It may be helpful to include a site map, or other supporting information. If there are one or more possible solutions that you are aware of, it would be helpful to discuss the implications of each option.
5. If the issue is identified by the Regions, the States, or the field contractor, submit the issue to the NPL Coordinator in the Region. The NPL Coordinator will in turn submit the issue to the SAB Regional Coordinator. He or she will review the issue, request any needed clarification, determine that it is appropriate for Review Team consideration, and forward it to the SAB Review Team Coordinator. Members of the QA team should submit issues directly to the appropriate SAB Regional Coordinator.
6. After the Review Team discussion, the resolution will be drafted, circulated for comment among members, and revised accordingly. As soon as the revised resolution is available, it will be provided to the Region by the SAB Regional Coordinator. In certain time critical situations, a verbal resolution may be communicated.
7. On a periodic basis, accumulated issues and resolutions will be distributed to all Regions. The issues will be assigned a code using the same alphabetical system as for the Update 11 notebook (e.g., SW-T indicates surface water - target). However, the numeric code indicating the Region of origin will be dropped, and from now on issues will be numbered consecutively.

If you have any questions about this process, or about the status of a particular issue, please contact the appropriate SAB Regional Coordinator.

APPENDIX D: MAP SPECIFICATIONS FOR THE HRS DOCUMENTATION RECORD

APPENDIX D

MAP SPECIFICATIONS FOR THE HRS DOCUMENTATION RECORD

GENERAL GUIDELINES

Clarity: The purpose of each map should be specified. Any data contained upon the map should be referenced (e.g., areas of karst noted on a topo map should be referenced to a primary source of the information). The site should be clearly marked on all maps (for large scale maps, it may be clearer to mark the one- or four-mile radius to identify the site), and enough landmarks or key features identified on site sketches to relate the sketch back to the topo map. The reference number should be displayed on the map because often the maps are pulled out of the reference packages to be used. Also note on the maps if any other references were used to compile the information found on the map.

Legibility: Original maps are preferred. (This is especially true of topo maps, which are inexpensive, easy to obtain, and a source of a great deal of information). However, good copies are acceptable if information has been keyed so that color copying is not required to decipher the data. Maps that are difficult to obtain or copy (such as certain geologic maps or water distribution maps, for example) can be sent as originals -- the QA reviewers can copy them and return the original. If the Region itself wishes to copy large maps, use a map copier, rather than reducing the copy or piecing together several smaller sheets of paper.

Scale: Maps and diagrams should indicate a scale and a north arrow; if not drawn to scale, that should be stated. The scale should be appropriate to the data depicted. For example, the use of a topo map is probably inadequate to determine area of contaminated soil for all but the largest of areas. Ensure that when copying larger maps, a) the scale is included with the copy, and b) reductions or enlargements are accounted for.

Base Maps: Although information for various pathways or data points within a pathway can be consolidated onto a single map, the use of several maps is preferred to prevent "overloading" any one map. However, when time and resources permit, it is useful to plot well locations, concentration data and geologic formations on a single base map.

Specific maps which can be incorporated into particular areas of the documentation record are indicated below:

Topographic Maps. Usually the most useful maps included in the HRS documentation record are USGS topographic maps, particularly the 7.5-minute quadrangle map. These maps provide many helpful details on the area surrounding the site, and provide an accurate picture of spatial relationships. Among the types of data which can be portrayed on these maps are:

- Sources
- Target distance limits(s)
- Wells, including nearest well
- Surface water intakes, including nearest intake
- Fisheries and wetlands
- Distance to surface water, including probable point of entry and migration pathway
- Watershed boundaries
- Location of background and hit samples
- Population within one mile for soil exposure pathway.

Note that for reasons of scale, location of soil samples cannot be put on the topo map(s).

Geologic maps. A variety of specialized maps are often available to aid in evaluating of the site. Their use, particularly when trying to define an area of karst or when evaluating aquifer interconnection, is invaluable. Types of maps which might prove useful include:

- Hydrologic unit maps. These identify surface water management areas, and could aid in determining watershed.
- Geologic Quadrangle maps. Keyed to the 7.5-minute series of topo maps, these can be used to generate geologic cross-sections to better characterize the area around the site. A complete set of these maps is currently not available.
- Hydrologic Atlas sheets. These provide information on hydrologic investigations of specific areas. The accompanying explanatory text is also a valuable aid in evaluating the site.

Other maps. Several other sources for maps are available. Municipal water districts, for example, frequently have water distribution maps. The Corps of Engineers or the local development or flood insurance agency has flood control maps. Maps of wetland or other sensitive environments can be obtained from local conservation agencies of the U.S. Fish and Wildlife Service.

PATHWAY-SPECIFIC CONSIDERATIONS

Within pathways, maps have different uses and may require different treatment. The following describes the types of information required within each pathway and how to display it.

Source Characterization

Always include the following two maps in this section of the HRS record:

- A Site Location map, which can be a copy of a small portion of either the topo or other general use map, to show the general location of the site with respect to county boundaries, nearby towns or communities, and the setting in general.
- A Site Sketch or Map of sufficient scale to show the more detailed setting, including the following: the location of the sources with their name and number clearly marked; any nearby structures -- for example, buildings (identify what they are), roads, railroads, fences and other barriers; paved areas; nearby surface water bodies; and ditches. (USGS topo maps are often too small in scale to show some of the features which affect migration of contamination via drainage in the immediate vicinity of the site.) In some cases, it may be appropriate to show the location of monitoring wells and/or other sampling locations which might be key to identifying the nature of the source. Contractor final field investigation reports often include these types of sketches and maps and require minor, if any, modification for use in the HRS record. Aerial photographs can also provide valuable information on the layout of the site.

Waste Quantity

- For any area measurements (and some volume waste quantity calculations), include a scale map, sketch or aerial photo that shows the appropriate linear measurements of each area evaluated.

Ground Water Pathway

- A bedrock map is often crucial for describing the aquifer(s) evaluated, especially for sites where the geology is complex. Show the four-mile radius (which will pinpoint the site). It is useful to indicate graphically the boundaries between karst and non-karst. If appropriate, show location of nearest well and public supply wells, so that the location of its surficial bedrock area is clearly documented. The USGS and similar publications from which bedrock maps are taken often have a cross-section as well. This diagram can be extremely useful in gaining an understanding of the aquifer systems at a site. When time and sufficient reliable data permit, develop cross-sections from site-specific data, such as well logs. Include multiple cross-sections, if possible. They should intersect each other at right angles to show the greatest amount of detail. Show both topography and geology of the area.
- Either a scale map or sketch should show the exact location and depth of all Level I and Level II wells, as well as the name of the aquifer being tapped.
- A clear, legible topo map should show the location of the site, the target distance rings (appropriately drawn; not just circles around the midpoint of the site), the nearest well, Level I and II wells, distribution boundaries of municipal supply systems, boundaries of karst vs. non-karst, etc.
- Whenever possible, include the latitude/longitude marks and the key for the scale.

Surface Water Pathway

- A topo or similarly appropriate map is required to show the migration pathway throughout the target distance limit. Indicate the following features: the location of each source evaluated for this pathway; drainage patterns and probable point of entry for each source; all affected surface water bodies; any structures or barriers that would inhibit overland flow (for example, railroad embankments); and location of drinking water or resource use intakes. Wetlands are best shown on separate wetlands maps. For smaller sites with several sources, it may be difficult to include all of this information without producing "map congestion." In such cases, information should be included in an additional map. The reader should be able to use the map to follow the written description in the HRS record of each segment in the target distance limit, as the pathway changes from one surface water body to another, and from fresh to salt water (or vice versa).
- For any observed release to surface water, include a scale sketch or map showing exact locations of all samples discussed in the HRS record for this factor. Location of drinking water intakes or resource use (e.g., irrigation) can be shown.
- Topos or other maps as appropriate should show what areas are evaluated for fish production in the food chain threat. Indicate the linear distance and/or area within an arc that is included in the evaluation. (Unless Level I or II targets are identified, topos showing the full 15 target distance limit are unnecessary.)
- For the environmental threat, a map should clearly indicate the linear distance of wetland frontage and the precise location of sensitive environments, unless security reasons preclude this.

Soil Exposure Pathway

- If not already provided as described above under "Waste Quantity," include a map clearly showing all areas of observed contamination, with all sample locations noted. For targets, show where targets are located within 200 feet of these areas. Indicate where there are targets (resident population) living on property with observed contamination. Show location of any terrestrial sensitive environments evaluated. Show one-mile radius, and indicate where nearby individual and population targets are located.

Air Pathway

- Clearly indicate sources and locations of sampling points if an observed release has been scored. Meteorological data, such as prevailing wind direction should be indicated on the map. If possible, the map or diagram should include any areas which might be considered alternate sources of the release, so that their potential impact can be evaluated.
- Draw distance rings on the map at the required intervals, based on distances from source boundaries or sample locations, as appropriate.

APPENDIX E: GUIDELINES FOR THE PREPARATION OF NPL SITE SUMMARIES

APPENDIX E

GUIDELINES FOR PREPARING NPL SITE SUMMARIES

A site summary describes the site, the conditions that justify placing it on the NPL, any enforcement or cleanup actions, and any other relevant information that might be of interest to the general public. The HRS documentation record provides the basis for proposing or finalizing a site for the NPL. The summary should reflect -- but is not restricted to -- the contents of the record.

The summaries are available to the public after they are formally released when the proposed and final NPL rules of which they are a part are published in the Federal Register. The summaries reflect EPA's preliminary judgments on site sizes and extent of contamination. The narrative summaries have no legal significance, but their wide distribution requires that they be carefully prepared. For each site:

- Consult attached draft guidelines in naming site.
- Provide the following:
 - CERCLIS ID number (one only)
 - Site location -- street address (or other specific information), municipality/city, county, and State.
- Provide as much of the following information as possible, citing source and date, especially where noted:
 - Important demographic and geographic information (nearby population, local land use, surface water, sensitive ecosystems, etc.).
 - Size of site or release (best estimate based on available information).
 - Nature of business or operation (landfill, recycling, manufacturing, etc.). Is site permitted? By whom? For what?
 - Wastes present (composition, physical state, amounts, etc.), and nature of disposal (buried, on surface, etc.). Include source and date of information.
 - Any relationship to policy issues -- Resource Conservation and Recovery Act (RCRA), for example.
 - All routes/threats scored.
 - Media affected on-site and off-site, if scored on observed release. Include source and date of analytical data.
 - Route characteristics, if scored on potential to release. Media threatened on-site and off-site.
 - History of ownership -- private, public, operating, not operating, bankrupt, etc. Name potentially responsible parties, if a matter of public record. Name businesses, but generally not individuals.
 - Cleanup actions or scheduled actions.
 - Enforcement actions taken against responsible parties.

- In writing the summary:
 - To avoid legal problems, do not make unfounded allegations.
 - Avoid jargon ("aquifer of concern") and use technical terms sparingly. Consider your audience -- the general public.
 - Use active voice as much as possible and identify the actor. For example, say "EPA erected a fence" instead of "A fence was erected."
- Limit the site summary to one to two double-spaced typewritten pages.
- Consult recent summaries.

APPENDIX F: GUIDELINES FOR NAMING OF NPL SITES

APPENDIX F

GUIDELINES FOR NAMING OF NPL SITES

It is very important that Regions carefully select site names before they are proposed for the NPL. As a general policy, names will not be changed between proposal and finalization because of the public confusion that results from such an action.

The following guidelines are intended to help in assigning site names that are fair to interested parties and that are descriptive, informative, and consistent in style:

- **Select the name that most clearly informs the public as to what appears to be the primary source(s) of the problems at the site on the basis of the information available at the time.** In most cases, this should be the principal operator (Jones Disposal Service, for example), if definitely known. If the site is widely known by another name (Smith Junkyard), the public interest may be served best by assigning the name "Jones Disposal Service/Smith Junkyard." Avoid using business or land owners that were not directly and substantially involved in creating the problems at the site.

If the principal operator cannot be definitely identified or there are more than three potentially responsible parties, consider assigning a geographic name: "Highway 72 Disposal Area," for example. Geographical names should not be used as a way of protecting responsible parties. They can also offend local sensitivities.

- **For large companies, specify the plant or facility -- for example, "Perfect Chemicals Co. (Bay City Plant)."** If the company has more than one plant in a city, use something more specific such as a street or area -- for example, "Perfect Chemicals Co. (Industrial Way Plant)."
- **Use complete company names, including Co., Corp., and Inc.** This helps distinguish between roadside or midnight dumps and established operations.
- **Use descriptive terms.** Instead of "site," use some term (for example, landfill, dump, pit, plant, industrial park, residential area) that suggests the nature of the site.
- **Avoid starting a name in such a way that it is hard to find in an alphabetical listing.** For example, Bedford Village Wells is preferable to Village of Bedford Wells.
- **If assigning an individual's name, generally start with the family name.** For example, "Johnson Lagoons" is preferable to "William Johnson's Lagoons."
- **Consult the NPL staff for guidance.**
- **Make certain that the narrative summary explains the significance of the name.**

DRAFT

**APPENDIX G: NPL CHARACTERISTICS
DATA COLLECTION FORM**

NPL Characteristics Data Collection Form

Page 1 of 5

DRAFT

Instructions:

The NPL Characteristics Data Collection Form is designed to standardize hazardous waste site information for input into the NPL Characterization database. The primary sources of information for this form are Regional site file materials (e.g. PA, SI), along with the site HRS package. However, if no hard data are available for a question, estimates based on professional judgment and other sources of information are acceptable. As you complete the form, please keep the following in mind:

1. Complete the form in dark pencil.
2. Use the most accurate level of information available (e.g., SI level information over PA).
3. If the designated response fields for a question are not adequate to accurately describe the site, use the "other" response with a brief explanation. Do not include this information solely in the "comments" section.

Record Information:

1. Site Reviewer: _____
2. Date: _____
3. Site Name (as entered in CERCLIS): _____

4. Site Location (city/county, state): _____
5. Site CERCLIS Number: _____
6. Site Coordinates (check unknown only if no information is available):

—°'— " —°'— "
— N. Latitude — W. Longitude —

☐ Multiple
☐ Unknown

7. Congressional District: _____

NPL Characteristics Data Collection Form

DRAFT

Site Name: _____

CERCLIS Number: _____

Page 2 of 5

Site Description

1. Setting (relative to local area's population density/distribution; check 1):

- | | |
|--|---|
| <input type="checkbox"/> Urban: central city areas | <input type="checkbox"/> Rural: outside of suburban areas |
| <input type="checkbox"/> Suburban: bordering urban areas | <input type="checkbox"/> Unknown |

2. Current Owner (or operator if no distinction is made; check 1):

- | | | |
|---|---------------------------------------|---|
| <input type="checkbox"/> Private - Industrial/Commercial | <input type="checkbox"/> State | <input type="checkbox"/> Multiple Owners/Different Categories |
| <input type="checkbox"/> Private - Individual (residential) | <input type="checkbox"/> Federal | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Municipal | <input type="checkbox"/> Indian Lands | <input type="checkbox"/> Other (fill in): _____ |
| <input type="checkbox"/> County | | _____ |

3. Current Site Status (check 1):

- ☐ Active: legal or illegal waste treatment, storage or disposal activities currently occur onsite.
- ☐ Inactive: no waste treatment, storage or disposal activities currently occur onsite.
- ☐ Site with Unknown Source (ground water contamination plume, sediment contamination).

4. Years of Operation (fill in or check unknown):

- ☐ Waste activity a one-time event (spill): (year) _____
- ☐ Active site: (beginning year) _____ to (date of site evaluation) _____
- ☐ Inactive site: (beginning year) _____ to (ending year) _____
- ☐ Unknown (only if no historical information is available)

5. How Initially Identified (check 1):

- | | |
|--|---|
| <input type="checkbox"/> Citizen Complaint (including PA petition) | <input type="checkbox"/> Other Federal Program |
| <input type="checkbox"/> State/Local Program | <input type="checkbox"/> Incidental |
| <input type="checkbox"/> CERCLA Notification | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> RCRA Notification | <input type="checkbox"/> Other (fill in): _____ |

NPL Characteristics Data Collection Form

DRAFT

Site Name: _____

CERCLIS Number: _____

Page 3 of 5

Site Description (cont.)

6. Entry Responsible for Waste Generation (not the entity that generated the original product; check all that apply, check unknown only if no information is available).

- | | |
|--|--|
| <input type="checkbox"/> Manufacturing (if checked, must check a subitem) | <input type="checkbox"/> Retail Activities |
| <input type="checkbox"/> Lumber and Wood Products | <input type="checkbox"/> Mining (if checked, must check a subitem) |
| <input type="checkbox"/> Inorganic Chemicals | <input type="checkbox"/> Metals |
| <input type="checkbox"/> Plastic and Rubber Products | <input type="checkbox"/> Coal |
| <input type="checkbox"/> Paints, Varnishes | <input type="checkbox"/> Oil and Gas |
| <input type="checkbox"/> Industrial Organic Chemicals | <input type="checkbox"/> Non-metallic Minerals |
| <input type="checkbox"/> Agricultural Chemicals (pesticides, fertilizers) | <input type="checkbox"/> Landfill (waste generator unknown) |
| <input type="checkbox"/> Miscellaneous Chemical Products
(such as adhesives, explosives, ink) | <input type="checkbox"/> Municipal |
| <input type="checkbox"/> Primary Metal Industries | <input type="checkbox"/> Industrial |
| <input type="checkbox"/> Metal Coating, Engraving and Allied Services | <input type="checkbox"/> Both |
| <input type="checkbox"/> Metal Forging and Stamping | <input type="checkbox"/> Federal Facility |
| <input type="checkbox"/> Fabricated Structural Metal Products | <input type="checkbox"/> Military |
| <input type="checkbox"/> Electronic Equipment | <input type="checkbox"/> Department of Energy |
| <input type="checkbox"/> Other Manufacturing | <input type="checkbox"/> Other |
| <input type="checkbox"/> Recyclers | <input type="checkbox"/> Unknown |
| | <input type="checkbox"/> Other (fill in): _____ |

7. Site Activities/Waste Deposition (check all that apply; check unknown only if no information is available):

- | | |
|---|---|
| <input type="checkbox"/> Surface Impoundment (primarily liquid) | <input type="checkbox"/> Tanks - Below Ground |
| <input type="checkbox"/> Waste Piles (primarily solid, covered or uncovered) | <input type="checkbox"/> Discharge to Sewer/Surface Water (intentional permitted or illegal discharge; <u>not</u> secondary runoff) |
| <input type="checkbox"/> Municipal Landfill | <input type="checkbox"/> Recycling |
| <input type="checkbox"/> Industrial Landfill | <input type="checkbox"/> Airborne Release/Incineration (including incinerators, boilers, fire and burn pits, any fire incidents) |
| <input type="checkbox"/> Drum/Container Storage (intentional storage in specified areas) | <input type="checkbox"/> Spill (accidental, one time event only, <u>not</u> leaking drums or tanks) |
| <input type="checkbox"/> Illegal Dumping (unpermitted dumping by site owner/operator in undesignated disposal area) | <input type="checkbox"/> Unknown |
| <input type="checkbox"/> Unauthorized Dumping by a Third Party | <input type="checkbox"/> Other (fill in): _____ |
| <input type="checkbox"/> Tanks - Above Ground (check if tank type unknown) | |

Waste Description

8. Wastes Deposited or Detected Onsite (check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Organic Chemicals | <input type="checkbox"/> Radioactive Waste |
| <input type="checkbox"/> Inorganic Chemicals | <input type="checkbox"/> Oily Wastes |
| <input type="checkbox"/> Solvents | <input type="checkbox"/> POTW Sludge |
| <input type="checkbox"/> Laboratory/Hospital Wastes | <input type="checkbox"/> Municipal Wastes |
| <input type="checkbox"/> Acids/Bases | <input type="checkbox"/> Construction/Demolition Wastes |
| <input type="checkbox"/> Paints/Pigments | <input type="checkbox"/> Lead |
| <input type="checkbox"/> Explosives | <input type="checkbox"/> Asbestos |
| <input type="checkbox"/> Pesticides/Herbicides | <input type="checkbox"/> PCBs |
| <input type="checkbox"/> Metals | <input type="checkbox"/> Creosote |
| <input type="checkbox"/> Fly and Bottom Ash | <input type="checkbox"/> PCP |
| <input type="checkbox"/> Mining Wastes | <input type="checkbox"/> Dioxins |
| <input type="checkbox"/> Smelting Wastes | <input type="checkbox"/> Other (fill in): _____ |

NPL Characteristics Data Collection Form

DRAFT

Site Name: _____

CERCLIS Number: _____

Page 4 of 5

Response Actions

9. Response/Removal Actions (check all that apply):

- | | |
|---|--|
| <input type="checkbox"/> Emergency Waste Removal Has Occurred | <input type="checkbox"/> Residents Have Been Relocated |
| <input type="checkbox"/> Drinking Water Well Has Been Closed | <input type="checkbox"/> Site Access Has Been Restricted |
| <input type="checkbox"/> Alternative Water Supply Has Been Provided | <input type="checkbox"/> Other Removal Action Has Occurred |
| <input type="checkbox"/> ATSDR Health Advisory Has Been Issued | <input type="checkbox"/> Other Emergency Action Has Occurred |

RCRA Information

10. For all active facilities, RCRA Site Status (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> Subtitle C | <input type="checkbox"/> Subtitle D |
| <input type="checkbox"/> Treatment, Storage, and Disposal Facility | <input type="checkbox"/> Municipal Landfill |
| <input type="checkbox"/> 90 Day Accumulator | <input type="checkbox"/> Industrial Landfill |
| <input type="checkbox"/> Small Quantity Generator | |
| <input type="checkbox"/> Very Small Quantity Generator | <input type="checkbox"/> Other(fill in): _____ |
| <input type="checkbox"/> Converter | <input type="checkbox"/> Not Applicable |

Demographic Information

11. Workers Present Onsite (check 1):

- ☐ Yes ☐ No ☐ Unknown

12. Distance to Nearest Non-Worker Individual (check 1):

- | | | |
|---|---|-----------------------------------|
| <input type="checkbox"/> Onsite | <input type="checkbox"/> > 1/4 - 1/2 Mile | <input type="checkbox"/> > 1 Mile |
| <input type="checkbox"/> > 10 Feet - 1/4 Mile | <input type="checkbox"/> > 1/2 - 1 Mile | <input type="checkbox"/> Unknown |

13. Residential Population Within 1 Mile (check yes and fill in number, or check no or unknown):

- _____ ☐ Yes ☐ No ☐ Unknown

14. Residential Population Within 4 Miles (check yes and fill in number, or check no or unknown):

- _____ ☐ Yes ☐ No ☐ Unknown

Water Use Information

15. Local Drinking Water Supply Source (check all that apply):

- | | |
|---|--|
| <input type="checkbox"/> Ground Water (within 4 mile distance limit) | <input type="checkbox"/> Surface Water (within 15 mile distance limit) |
| <input type="checkbox"/> No Water Withdrawals Within Target Distance Limits | <input type="checkbox"/> Other (fill in): _____ |

16. Total Population Served by Local Drinking Water Supply Source(s) (fill in or check unknown or not applicable):

- _____ or ☐ Unknown ☐ Not Applicable

17. Drinking Water Supply System Type for Local Drinking Water Supply Source(s) (check all that apply):

- | | |
|--|---|
| <input type="checkbox"/> Municipal (services over 25 people) | <input type="checkbox"/> Private |
| <input type="checkbox"/> Unknown | <input type="checkbox"/> Not Applicable |

NPL Characteristics Data Collection Form

DRAFT

Site Name: _____

CERCLIS Number: _____

Page 5 of 5

Water Use Information (cont.)

18. Surface Water Adjacent to/Draining Site (check all that apply and indicate if the water body is contaminated):

☐ Stream _____
☐ Wetland _____
☐ River _____
☐ Bay _____
☐ Lake _____

☐ Ocean _____
☐ Pond _____
☐ None _____
☐ Unknown _____
☐ Other (fill in): _____

Comments:

APPENDIX H: INFORMATION RELEASE POLICY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 17 1991

MEMORANDUM

OFFICE OF
GENERAL COUNSEL

SUBJECT: Treatment under FOIA of Documents Generated in Site Assessment Process

FROM: George B. Wyeth *George B. Wyeth*
Attorney
Solid Waste and Emergency Response Division (LE-132S)

Alan Margolis *Alan Margolis*
Attorney
Grants, Contracts and General Law Division (LE-132G)

TO: Janet Grubbs
Site Assessment Branch
Office of Solid Waste and Emergency Response (OS-230)

At the May 1991 Site Assessment Section Chiefs' meeting, and on a number of occasions more recently, questions have come up regarding the extent to which materials prepared in the site assessment process (particularly preliminary HRS scoring sheets) may be withheld as "deliberative" in response to FOIA requests. This memorandum responds to those questions; it should be noted that the advice given here is general in nature, and in specific cases it is advisable to consult a regional or OGC FOIA attorney. Moreover, this advice is not intended to bind the Agency in connection with final agency determinations on FOIA appeals.

First to be protected under FOIA as deliberative, documents must be (1) predecisional (i.e., prior to the adoption of an agency policy or decision), and (2) deliberative (i.e., making recommendations or expressing opinions on legal or policy matters.) Draft HRS scores would generally fall within this category. A draft that is adapted as final agency policy is no longer protected (however, such scores are made public in the docket at the time a site is proposed for the NPL anyway).

¹ Documents that are not protected under FOIA are commonly referred to as "releasable." It should not be inferred that the Agency must always exercise its right to withhold documents; exercise of a FOIA exemption is a matter of Agency discretion. The Agency may choose to release deliberative or other privileged documents; it simply need not do so. In general, however, the Agency's practice has been not to release draft HRS scoring sheets, for policy reasons.

Factual material in the agency's possession is not deliberative and must generally be released.

One question raised at the Section Chiefs' meeting had to do with releasing information after a site is assigned "no further action" status ("NFRAPed"), based on its HRS score. A NFRAP determination is neither predecisional nor deliberative and may not therefore be withheld pursuant to the deliberative process prong of FOIA exemption 5. Therefore, materials underlying the NFRAP decision are not withholdable under the deliberative process privilege or other FOIA exemptions (e.g., the final score and supporting scoring sheets), and are considered releasable.² Draft scoring sheets would, however, not be releasable.

A related question had to do with the status of preliminary HRS scoring sheets -- that is, sheets other than the ones that formed the basis for a final decision (either to list or to NFRAP). Often, preliminary HRS scores are calculated which are superseded as the analysis is refined or new data is obtained. To the extent these are retained, they remain deliberative and need not be disclosed. This is true even after a final score has been determined. This is to ensure that staff feel free preparing tentative scores based on a partial analysis, without having to fear that the preliminary scores will be used against the Agency later.

A third FOIA-related question recently came from one of the regions. Since the answer may be of more general interest, we thought we would include it here. The region had received a request for all documents contained in the HRS scoring package for a site that is being considered for proposal to the NPL, but has not yet been proposed. The HRS scoring sheets, including the documentation record, are clearly deliberative at this stage, and need not be disclosed. In addition, factual material in the package (i.e., factual references) need not be released. While factual material in the Agency's files is normally releasable, releasing materials in response to a request for "the HRS package" necessarily identifies particular factual material as being contained in a draft HRS package and thus sheds light on the nature of the Agency's analysis. Therefore, the contents of

² Other grounds for denying release include FOIA exemptions (b)(7)(A), which covers enforcement-sensitive documents and (b)(5), which, in addition to the deliberative process privilege, also incorporates the attorney-client privilege and the attorney work product privilege (i.e., materials prepared in, or in anticipation of, litigation). These exemptions (aside from the deliberative process application of (b)(5)) would not appear to be generally applicable to site assessment materials, although they might be applicable in particular cases.

the package need not be disclosed. (Of course, if the site is later proposed, the scoring package and supporting materials would become releasable, but they would then be made public in the docket anyway.)

The relationship between EPA and states raises significant FOIA questions as well. Communications from states that are deliberative in nature (i.e., communicating advice or opinions regarding the potential listing of a site) appear to be protected. Although there is only limited case law on this point, at least one court has held that material from state agencies sent to a federal agency for the purpose of giving the federal agency advice on a matter under consideration is generally privileged.

Agency staff should bear in mind that during a rulemaking (i.e., after a site has been proposed in the Federal Register and before it goes final), communications from states, especially communications outside the normal course of implementing a cooperative agreement, may present a more complex issue. Communications in rulemaking will be discussed in a separate memorandum.

Agency staff should also keep in mind that documents originating at EPA and sent to states are subject to state FOIA-equivalent laws. Such laws may vary in the degree of confidentiality allowed. Regions may have to discuss with the state agencies they deal with what the rules are in those states before sending material that they may not want to have disclosed.

Finally, a question came up recently about whether HRS scores for sites that have been deferred to RCRA may be withheld. If the score is in fact a preliminary draft (which is generally the status of any HRS score for a site that has not been either proposed for listing or NFRAPed based on the score), it need not be released. This is not affected by the fact that the site is no longer being considered for listing, if the reason it is no longer being considered is deferral to RCRA rather than its HRS score. In short, HRS scoresheets for sites that have been deferred to RCRA remain deliberative and need not be released.

I hope that this helps to answer the questions you raised. If you have any further questions, please do not hesitate to contact us.

Annotation to Regional Quality Control Guidance

In an effort to ease package submission by the Regions and reduce resource requirements to do so, EPA Headquarters will require only one full set of references and an additional copy of the SI Report (if it is used as a reference). Consequently, the first sentence, final paragraph p. 20 of the attached Guidance should read:

The Region will send three hard copies of the documentation record, **one copy** of the references, **and an additional copy of the SI Report if included as a reference** to EPA Headquarters. The references and two copies of the documentation record will go to the EPA contractor for review (after a Headquarters QC check) and the **final copy of the documentation record and the SI Report** will be kept at EPA Headquarters. Be sure to include the diskettes for PREScore and the documentation record as well.