



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

MAY 3 1993

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Preliminary Assessment (PA) Review Checklist
FROM: Janet Grubbs, Chief
Site Assessment Branch (OS-5204G)
TO: Federal Facility Contacts

I am providing the attached PA review checklist as a supplement to the Guidance for Performing Preliminary Assessments Under CERCLA (EPA/540/G-91013, September 1991) that you had previously received.

This checklist summarizes the most important factors that each PA may need to evaluate and each PA report may need to address. Anyone conducting a PA can use this checklist to ensure the adequacy of the PA report. Likewise, PA reviewers can use the checklist as a review guide.

If you have any comments or questions on this checklist, please call John Hollister at (703) 603-8835.

Attachment.

cc: Don Franklin (OFFE)
Site Assessment Section Chiefs (Regions 1 - 10)

PA REVIEW CHECKLIST

Site Name:

CERCLIS ID No.:

Location (City, County, State):

Prepared by (Agency):

Date:

Reviewer Name:

Agency:

Document Reviewed:
(PA Report/Scoresheets/Both)

Date of Review:

Site Name: _____

PA REPORT REVIEW CHECKLIST

The preliminary assessment (PA) review checklist was designed to evaluate the quality of PA work products. The review will ensure that EPA decisions concerning the disposition of sites are made in a nationally consistent, scientifically based, and efficient manner.

The order in which information is presented in the PA does not have to be consistent with the checklist, but the PA should be organized in a logical sequence and consistent with PA guidance. Relevant pages of the PA guidance manual (Guidance for Performing Preliminary Assessments Under CERCLA, OSWER Directive 9345.0-01A, September 1991) are provided in parentheses throughout the checklist.

All factual information should be referenced in the PA report and PA scoresheets with page numbers provided. The reviewer should place a checkmark in the "Ref(s) Checked" column when information is verified in the references. If the information is not supported by the reference material or the information is not referenced, the reviewer should place an NS (not supported) in this column. The reviewer may write in the space provided and attach sheets as necessary.


The reviewer should indicate in the left column whether the following information is included in the PA narrative by placing a Y (yes), N (no), or NA (does not apply to the site) in the space provided. Place an I (incomplete) in the left column for information that is included but is not complete, and an S (scoresheets) if the information is included in the scoresheets but not in the PA report. The bold, italicized areas highlight several critical factors.

This checklist and the PA guidance manual can be ordered from the National Technical Information Service (NTIS) by calling 703-487-4650. To order both documents, the order number is PB92-963303. The checklist by itself is order number PB93-963342.

4/28/93

Site Name: _____

I. PA Content

| <u>Introduction</u> | <u>Ref(s)</u> <u>Checked?</u> |
|------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Does the PA include the following information: | |
| ___ Agency/name of organization performing PA (p. 145) | |
| ___ Authority under which PA was conducted (p. 145) | |
| ___ Site name (p. 14) | ___ |
| ___ Site alias (names other than that entered in CERCLIS) (p. 15) | ___ |
| ___ Site address (street, city, county, state) (p. 145) | ___ |
| ___ CERCLIS ID number (p.15) | |
| ___ Site name and ID number identical to CERCLIS entry? | |
| ___ Purpose of PA (p. 145) | |
|  ___ <i>RCRA status</i> (p. 16) | ___ |

Comments: _____

Did PA activities include:
File review? (pp. 21-23) Y/N____
Target survey? (pp. 31-32) Y/N____
Site reconnaissance? (pp. 27-29) Y/N____

Comments: _____

Site Name: _____

| <u>Site Location/Description</u> | Ref(s) <u>Checked?</u> |
|-------------------------------------------------------------------------------------------------|---------------------------|
| Does the PA include the following information: | |
| ___ Geographic coordinates (latitude/longitude) (p. 40) | ___ |
| ___ Worksheets for latitude/longitude coordinate calculations (p. 40) | ___ |
| ___ Site setting/nearby land use (Appendix D, p. 4) | ___ |
| ___ Type of site (e.g., plating facility, landfill) (p. 41) | ___ |
| ES ___ <i>Site status (active/inactive) (p. 14)</i> | ___ |
| ___ Years of operation (p. 40) | ___ |
| ___ Current site activities/use (p. 145) | ___ |
| ___ Current disposal/storage practices (p. 40) | ___ |
| ES ___ <i>Source characterization (active, inactive, and historical sources) (p. 42)</i> | ___ |
| ___ <i>Description (p. 43)</i> | ___ |
| ___ <i>Dimensions (p. 14)</i> | ___ |
| ___ <i>Known or suspected wastes and hazardous substances (p. 40)</i> | ___ |
| ___ <i>Description of containment and condition (p. 40)</i> | ___ |
| ___ Size of site (p. 14) | ___ |
| ___ Site accessibility (identification of access restrictions, natural barriers) | ___ |
| ___ Site location map (p. 145) and other figures | ___ |
| ___ 1-mile source radius (pp. 23, 145) | ___ |
| ___ Overland drainage route(s) (p. 145) | ___ |
| ___ Probable point of entry (PPE) to surface water (Appendix C, p. 5) | ___ |
| ___ Nearest well, intake, residence (p. 145) | ___ |
| ___ Sensitive environments (p. 145) | ___ |

Site Name: _____




- ___ Site sketch (p. 44) _____
- ___ Major structures (e.g., buildings, paved areas, fences) (p. 44) _____
- ___ Source areas (p. 44) _____

Comments: _____

Operational History and Waste Characteristics

Ref(s)
Checked?

Does the PA adequately include the following information:

- ___ Ownership (public/private/other) (p. 40) _____
- ___ Current owners, address(es), and dates of ownership (p. 40) _____
- ___ Current operators, address(es), and dates of operation (p. 40) _____
- ___ Former owners, address(es), and dates of ownership (p. 40) _____
- ___ Former operators, address(es), and dates of operation (p. 40) _____
- ___ Description of historical site activities (p. 40) _____
- ___ Description of wastes generated on site (p. 40) _____
- ___ Historical disposal/storage practices (p. 40) _____
- ___ Historical information on spills (p. 40) _____
- ___ Past source areas (if a removal has occurred) (p. 40) _____
-  ___ *Removal actions, including descriptions, dates, agencies that conducted the removal, and destination of wastes removed (p. 145)* _____
-  ___ *Known/estimated waste quantity (i.e., constituent, wastestream, volume, and area, as applicable) for each source (pp. 44-51)* _____
- ___ Information on permits, including issuing agency, date, discussion of inspection results, permit numbers, and violations (p. 145) _____
-  ___ *Information on other regulatory agency involvement (p. 145)* _____

Site Name: _____

___ Other investigations, including identification of investigating agency, date, and results (pp. 21-30) _____

___ Previous sampling, if any, including discussion of analytical data and summary of results (p. 145) _____

Comments: _____

Ground Water Pathway

Ref(s)
Checked?

Does the PA include the following information:

___ Physiographic province underlying site/sources _____

ES

___ *Depth to shallowest aquifer (p. 56)* _____

___ Permeability of strata overlying shallowest aquifer (p. 145) _____

___ Net precipitation (p. 54) _____

___ Identification of aquifers in order of increasing depth (p. 145) _____

___ Aquifer description, including use, thicknesses, general flow direction (p. 145) _____

___ Confining layers (p. 145) _____

___ Aquifer interconnections within 4 miles of the site (or within 2 miles if source boundaries are well defined) (p. 145) _____

___ Aquifer discontinuities within 4 miles of the site (p. 145) _____

ES

___ *Karst features (if non-karst, this should be stated) (pp. 55, 57-58)* _____

___ Citizen complaints _____

___ Well closures (p. 26) _____

Site Name: _____

Comments: _____

- Is sufficient information provided to assess the likelihood of a release of hazardous substances to ground water? (pp. 53-58) Y/N _____**

Comments: _____

Ground Water Targets

Ref(s)
Checked?

Is the following ground water target information included:

- _____ Distance to nearest drinking water well (p. 73) _____**

- _____ Description of municipal and stand-by wells, including location/
distance from site, depth of well/aquifer from which water is
drawn (pp. 14, 62-65) _____**

- _____ If municipal and stand-by wells are part of a blended system,
total number of wells/intakes that contribute to the overall
system and the percent contribution of each well/intake within
the target distance limit (pp. 62-64) _____

- _____ Populations served by municipal well(s), including stand-by wells,
by distance category within 4 miles of the site (pp. 14, 62-65) _____**

- _____ Description of private wells within 4 miles of the site,
including aquifer(s) from which water is drawn and
associated population per distance category (pp. 14, 65) _____**

- _____ Other uses of ground water (e.g., irrigation, industrial) (p. 75) _____

- _____ Wellhead Protection Areas (p. 74) _____

Site Name: _____

Comments: _____

As presented, does the ground water population description provide enough information to calculate an HRS target value? (pp. 68-75) Y/N _____

Comments: _____

Surface Water Pathway

**Ref(s)
Checked?**

Does the PA include the following information:

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------|-------|
| Sketch of surface water migration path indicating probable point of entry (PPE) and target locations (pp. 82, 86-88, 146) | _____ |
| Facility discharges to surface water (including permit information) | _____ |
| Distance to surface water (p. 81) | _____ |
| Floodplain designations/flood frequency (p. 83) | _____ |
| Surface soil type and permeability of overland drainage route (p. 79) | _____ |
| Drainage area description (p. 79) | _____ |
| 2-year, 24-hour rainfall (p. 79) | _____ |
| Mean annual precipitation (p. 79) | _____ |
| Water body types along 15-stream-mile migration route, including segment description and intermittent/perennial depiction (p. 91) | _____ |
| Stream flow characteristics of each segment (p. 91) | _____ |

Site Name: _____

____ Visual signs of contamination (e.g., oily sheen, stressed vegetation, sediment discoloration, absence of wildlife) (pp. 80, 95) _____

____ Fishery, intake, and/or surface water recreational area closures (p. 95) _____

Comments: _____

Is sufficient information provided to assess the likelihood of a release of hazardous substances to surface water? (pp. 78-85) Y/N _____

Comments: _____

Surface Water Targets

Ref(s)
Checked?

Is the following surface water target information included:

____ Identification and location of drinking water intakes, including standby intakes (p. 88) _____

____ Population served by each intake (apportioned population if the intake is part of a blended system) (p. 90) _____

____ Description and location of fisheries (p. 91) _____

____ Organisms fished _____

____ Other uses of surface water (p. 102) _____

____ Description and location of sensitive environments in or contiguous to the surface water migration path (p. 92) _____

Site Name: _____

____ Wetland frontage (p. 93) _____

Comments: _____

- As presented, does the surface water population description provide enough information to calculate an HRS target value for the drinking water threat? (pp. 88-90, 94-102) Y/N/NA_____ For the human food chain threat? (pp. 91-92, 103-104) Y/N/NA_____ For the environmental threat? (pp. 92-93, 105-107) Y/N/NA_____**

Comments: _____

Ref(s)

Soil Exposure Pathway

Checked?

Does the PA include the following information:

- ____ Identification of known/suspected areas of contamination (pp. 110-111)** _____
- ____ Discussion of previous surface soil sampling, including analytical data and summary of results (p. 145-146)** _____
- ____ Attractiveness/accessibility of areas of contamination** _____

Soil Exposure Targets

Is the following soil exposure target information included:

- ____ Residences, schools, and day care centers and associated populations within 200 feet of an area of known/suspected contamination (or within 200 feet and on the property of an area of contamination if boundaries of the area are well defined) (p. 118)** _____
- ____ Work areas and number of workers on site within 200 feet of an area of known/suspected contamination (p. 115)** _____

Site Name: _____

- _____ Use of site/areas of contamination (i.e., resources) (p. 123) _____
- _____ Terrestrial sensitive environments located on an area of known/suspected contamination (pp. 116, 122) _____
- _____ Nearby population within a 1-mile travel distance in 0 to 1/4 mile, >1/4 to 1/2 mile, and >1/2 to 1 mile distance categories (p. 124) _____

Comments: _____

ES *As presented, does the soil exposure population description provide enough information to calculate a resident population target value? (pp. 118-123) Y/N/NA _____ Nearby population target value? (p. 124) Y/N _____*

Comments: _____

Air Pathway Ref(s)
Checked?

Does the PA include the following information:

- _____ Direct observation of substances released to air (p. 127) _____
- _____ Site reconnaissance safety monitoring instrument (HNu, OVA) results _____
- _____ Description of cover material/containment (p. 40) _____
- _____ Discussion of previous air sampling, if any, including analytical data and summary of results (p. 127) _____
- _____ Reported odors/citizen complaints (p. 127) _____

Site Name: _____

— Known reports of adverse health effects associated with
a suspected/known release (p. 127) _____

Comments: _____

Is sufficient information provided to assess the likelihood of a release of hazardous substances to air? (p. 126-130) Y/N _____

Comments: _____

| <u>Air Targets</u> | <u>Ref(s) Checked?</u> |
|--------------------|----------------------------|
|--------------------|----------------------------|

Is the following air target information included:

| | |
|-------------------------------------------------------------------------|-------|
| — Distance to nearest residence or regularly occupied building (p. 137) | _____ |
|-------------------------------------------------------------------------|-------|

| | |
|------------------------------------------------------------------------------------------------------------------------------------|-------|
| — Population within 0 to 1/4 mile, >1/4 to 1/2 mile, >1/2 to 1 mile, >1 to 2 miles, >2 to 3 miles, and >3 to 4 miles (pp. 131-132) | _____ |
|------------------------------------------------------------------------------------------------------------------------------------|-------|

| | |
|--------------------------------------------------|-------|
| — Resources within 1/2 mile of the site (p. 140) | _____ |
|--------------------------------------------------|-------|

| | |
|---------------------------------------------------------------------------------------------------|-------|
| — Identification and location of sensitive environments within 1/2 mile of the site (pp. 138-139) | _____ |
|---------------------------------------------------------------------------------------------------|-------|

Comments: _____

Site Name: _____

13 *As presented, does the air population description provide enough information to calculate an HRS target value? (pp. 131-140) Y/N_____*

Comments: _____

Photodocumentation Log

Are photos of the site, accompanied by a written description and reference to their location on a site map, included as an attachment to the PA report? (p. 147)

Y/N_____

Comments: _____

Documentation

Are the following references included with the report?

- ___ Topographic map with 4-mile radius indicated (p. 23)
- ___ Population apportionment and calculation worksheets (Appendix C, p. 30)
- ___ County census data or population database (e.g., GEMS) (p. 24)
- ___ Field reconnaissance logbook (p. 29)

Comments: _____

Is the information throughout the narrative adequately referenced? (p. 143) Y/N_____

Comments: _____

Site Name: _____

Are statements in the narrative supported by the references cited? Y/N_____

Comments: _____

Are page numbers provided in reference citations? Y/N_____

Comments: _____

II. PA Quality



Does the PA provide sufficient information for SI planning? Y/N_____

Comments: _____



Is the information in the PA report presented in a format consistent with PA guidance? (pp. 143-144) Y/N_____

Comments: _____

Site Name: _____

- ES** Does the PA sufficiently address all pathway characteristics that could significantly impact the site decision? Y/N _____ All target information? Y/N _____
All site operational information? Y/N _____

Comments: _____

- ES** Are wastes adequately characterized based on available information? (pp. 44-51)
Y/N _____

Comments: _____

- ES** Did the PA highlight concerns that may not be addressed by HRS factors? (e.g., imminent explosion potential, Emergency Response notification) Y/N/NA _____

Comments: _____

- ES** Is the information presented in the PA report consistent with the information provided in the preliminary HRS scoresheets? Y/N _____

Comments: _____

Site Name: _____

- ES** *Are projected releases of hazardous substances to the environment, if any, appropriate for the site? Y/N/NA_____*

Comments: _____

- ES** *Is the designation of primary and secondary targets appropriate for significant or potentially significant pathways? Y/N_____*

Comments: _____

- ES** *Does the PA provide sufficient information to support a recommendation? Y/N_____*
Does the reviewer agree with the PA recommendation? (i.e., SEA, H, or L) Y/N_____

Comments: _____

