

**Instructions: Hazardous/PCB Waste Item Process Knowledge Worksheet**

PK Documentation No.                      Number assigned by WA after approval.  
Bldg. No./ Rm. No.                      Number assigned to the building and room for the waste being addressed/documentated by this PK form.

GI Name of Submitter:  
Date submitted.

WA Name of Approver:                      (submittal and approval only required when PK form is required for documentation purposes, see specific documentation required in items 2, 6, 7, 8).

Date approved:

1. Evaluate wastes that are RCRA commercial chemicals, RCRA nonempty containers, RCRA spill residues, or are commercial products where RCRA “sole active ingredients” may be present. Use CAS nos. to match chemicals to EPA’s P and U-lists.

Confirm waste is excess or unused and state so on W29 of WID or on Attachment C, T15, or on container log-in sheet.

Determine if the waste is a PCB-containing lab standard or commercial product containing PCBs (e.g., microscope immersion oil)?  
If yes, state PCB level on Attachment C, T6 thru T9.

2. Evaluate mixtures of used chemicals or spill residues of used chemicals or nonrecyclable used oil, including bulked items or labpacked items, for the presence of F-listed solvents or other listed (other F- or K-listed) wastes.

If RCRA solvents are present, confirm “spent” vs “other use” and sole use/mixture rule applicability. Assign listed codes as applicable on Attachment C, T13; address spent or regulated process on W29 of WID. (Other non-listed use may be product ingredient or not used as solvent, i.e., refrigerant.) If RCRA solvents present but not a listed waste, then address non-listed basis on PK form.

Address known chemical constituents present (percentages or ppm or other units) on Attachment C, T10 thru T16.

Verify generator’s accounting of contents. Resolve any discrepancies in that accounting. If based on generator records, identify record type (logbook, e-mail, etc.) and location on PK form.

If the waste is bulked or labpacked, ensure all original waste codes are retained and documented on the Attachment C, T13.

If waste codes are dropped, then this is treatment. Notify EP before conducting any treatment on RCRA or PCB wastes.

3. Does the mixture in item 2 contain any PCBs? For multiphasic wastes, evaluate PCBs for each phase. See Attachment C, T6 thru T9.

Is the waste a PCB analytical residue or a PCB decontamination residual?  
If yes, denote on WID, see W29.

4. Evaluate manufactured products or debris against existing RCRA exemptions and/or exclusions for such wastes. Note: lamps, circuit boards, batteries, scrap metal being disposed of are not exempt. If excluded, then it is not a RCRA hazardous waste. Provide reg cite for exclusions/exemptions on WID, in W29.
5. Is the waste a PCB spill clean up waste, PCB remediation waste, a PCB bulk product waste (e.g., PCBs in painted surface on equipment or debris, PCB floor tile, PCB adhesive, PCB gasket, or capacitor), or an item/article contaminated with or containing (e.g., light ballast, transformer, rectifier, air compressor system) PCBs? If yes, denote PCB waste type on WID, see W29, and state PCB status/level on Attachment C, T6 thru T9.
6. Determine if the waste is an unknown and if yes, if any RCRA characteristics or PCBs can be ruled out based on physical properties/appearance. If the waste is an unknown, have the waste sampled and analyzed to determine RCRA/PCB waste status. Manage unknowns as RCRA waste until proven non-RCRA.
7. Determine which RCRA characteristics apply. Watch for double coding errors. Do not use MSDS alone to rule out absence of TC constituents unless MSDS accounts for 100% of constituents. Call manufacturer or sample and analyze for any properties/constituents where PK basis is weak. If RCRA exemption applies, list exemption on the WID, see W29. Identify applicable characteristics in Attachment C, C3 thru C7 and Attachment C, T10 thru T15. If based on analyses, list sampling and analysis identification numbers on Attachment C, T1.
8. For applicable characteristic wastes, determine if UHCs are present that require treatment. Use 40 CFR 268.40 and 268.48 tables, latest version, as basis. Document UHCs requiring treatment on Attachment C, T10 thru T16. If based on analyses, list sampling and analysis identification numbers on Attachment C, T1.
9. Document basis for NRA determination. If based on green-tag or NRA analysis per Haz/Mixed Subject area, then note on WID, see W29. If based on generator determination, document generator's basis (personal knowledge, internal procedure, etc.) on PK form. If waste is known to have been DOE rad-added, but is green-tagable now, it can not be declared NRA: note on WID, W29, as "not NRA" see also ORNL Subject Area for Hold-for-Decay. If rad waste, use WSPS to document radiological PK. If applicable, document sampling and analysis identification numbers on Attachment C, T1.

<b>Hazardous/PCB Waste Item Process Knowledge Worksheet</b>			
PK Documentation No. Bldg. No./ Rm. No._GI Date WA_Date			
<b>1.</b> Does the waste contain a RCRA-listed discarded commercial chemical, an RCRA off-specification product, a RCRA container residue, or a RCRA spill residue of such a product, or a formulation in which the chemical is the RCRA “sole-active” ingredient in a commercial product (including a lab standard)?	Yes	No	If no, skip to 2. If yes, go to 7 and list chemicals on the 2109 form (see Attachment C, T10 thru T16) or on the container log in sheet.
Examples: chemicals in manufacturer’s original container with appropriate label, appropriate physical appearance, etc.			
Confirm “unused”/excess status of discarded chemicals	Yes	No	State excess or unused on 2109 for unique items (see W29 on WID or Attachment C, T15) or on container log sheet for each item in a labpack.
Is the waste a PCB-containing lab standard or commercial product containing PCBs (microscope immersion oil)?	Yes	No	State PCB status and level on 2109 form (see T6 thru T9 on Attachment C).
<b>2.</b> Is the waste a mixture of used chemicals (e.g., lab pour up bottle), a spill of a used chemical, or a nonrecyclable used oil?	Yes	No	If no, skip to 3.
Is the waste RCRA-regulated solvent(s) (F001-F005) used for their solvent properties (cleaner, degreaser, extractant, diluent, etc.)?	Yes	No	State “spent” on the 2109 form for unique items (see W29 on WID or Attachment C, T15) or on the container log sheet for each item in a labpack. If not spent, then state “used.”
Verify sole use of RCRA solvents and/or solvent mixture rule percentages in products based on before use composition and assign appropriate F001-F005 codes on the 2109 form.			Explain basis if not F-listed:
Verify waste generation process against	Yes, listed	No, not	Identify appropriate listed code on 2109 form (see Attachment C,

other RCRA -listed wastes (other F, K).		listed	T13) and denote process in waste description field (in W29 on WID).
Evaluate chemical constituents added and type of reactions/treatment/contamination introduced in the lab use/generation process to determine possible/known constituents.	Yes, addressed	No, not addressed	Address constituents (percentages or ppm) on 2109 form (see T10 and T15 on Attachment C).  Generator record location, if applicable:
Verify amount (volume/percentages) in container is comparable to the generator's accounting of contents.	Ok	Not ok	Explain resolution of inconsistencies.
If the waste is bulked or labpacked, then ensure all original waste codes are retained and documented.	Ok	Not ok	If ok, go on to 3. Explain resolution of inconsistencies.
<b>3.</b> Does the mixture in item 2 contain <u>any</u> PCBs? For multiphasic wastes, evaluate PCBs for each phase.	Yes	No	If yes, state PCB level(s) on 2109 form (see T6 thru T9 on Attachment C).
Is the waste a PCB analytical residue or a PCB decontamination residual?	Yes	No	If yes, denote on 2109 form (see W29).
<b>4.</b> Is the waste a manufactured product or debris?	Yes	No	If no, go to 5.
Check against RCRA exclusions for: arsenical treated wood; treated leather; circuit boards; recyclable batteries, lamps, scrap metal; etc.			If excluded provide reg. cite on WID (see W29).  If not excluded, go on to 5.
Is it contaminated with a listed waste (such as F001, 2, 4 or 5 spent solvent) including wipes?	Yes	No	Identify spent solvent on WID (see W29).
Is it contaminated with an F003 spent solvent?	Yes	No	If yes, then verify whether "dry" at the point of generation.
Is it contaminated with PCBs?	Yes	No	Verify level of PCBs present and identify on WID (see W29).
<b>5.</b> Is the waste a PCB spill clean up waste, PCB remediation waste, a PCB bulk product waste (e.g. PCBs in paint, capacitors, gaskets, or adhesives, etc.), or an item/article contaminated with or containing (e.g., light ballast, transformer, rectifier, air compressor system) PCBs?	Yes	No	If yes, state PCB status and level on 2109 form (see T6 thru T9, Attachment C).  Denote PCB waste type on 2109 form (W29 on WID).

<b>6.</b> Is the waste an unknown?	Yes	No	If no, go to 7. If yes, manage as RCRA until proven otherwise.
Evaluate physical properties/appearance (container type, oily substance, etc.) to limit the types of analyses to request - solid (TC list, PCBs, and/or potential reactive) vs liquid vs gas.			Explain properties/appearance that limits analyses.
<b>7.</b> Evaluate waste for characteristics: flashpoint, corrosivity, reactivity (pyrophorics/oxidizers/explosives/shock sensitive), and toxicity characteristics.	Yes, characteristic	No, not characteristic	If yes, address on Attachment C, C3 thru C7 and T10 thru T16). If no to all, then consult EP or WCO for assistance. Waste should be non-RCRA regulated.
Use MSDS, generator knowledge of ingredients and their percentages, and/or prior analyses as basis. (Provide MSDS no., manufacturer record, or historical analytical results no. on 2109 form and/or generator record location.)			Manufacturer or generator record location:
If aqueous alcohol solution, is alcohol < 24%, if yes, then not D001.	Yes	No	List "not D001 per 40 CFR 261.21(a)(1)" in W29 of WID.
Is there a RCRA exemption/exclusion for the waste (e.g., fly ash, special nuclear material, empty container, UST spill clean up wastes or TSCA-regulated dielectric fluid)?	Yes	No	If yes, list reg. cite in W29 of WID.
<b>8.</b> For RCRA characteristic wastes, then determine if UHCs require treatment?	Yes, UHCs present	No, UHCs not present or don't require treatment	If yes, identify UHCs, including concentrations, on Attachment C, T10 thru T16. If no, explain basis.
<b>9.</b> Is it NRA (in NRMMA and no history of rad. or potential for rad. according to the generator)? If green-tagged, retain copy and note on 2109 form. If based on generator knowledge, document generator basis. If based on NRA analysis, give analytical results no. on 2109 form.	Yes	No	Document generator basis on WID, see W29.  If no, then use Rad. Waste Process Knowledge Worksheet