

“Where the Hazardous Waste Regulations Are & Where They’re Heading”

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Recent Federal Final Rules

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Non-Hazardous Secondary Material that are Solid Wastes

- The Final Rule became effective on March 9, 2016 (81 FR 6687).
- The EPA added three materials to the list of non-waste fuels under the 40 CFR Part 241 Non-Hazardous Secondary Materials. They include:
 - Construction and demolition (C&D) wood processed from C&D debris;
 - Paper recycling residuals generated from the recycling of recovered paper, paperboard and corrugated containers and combusted by paper recycling mills; and
 - Creosote-treated railroad ties that are processed and then combusted in certain types of units.
- Website: <https://www.epa.gov/rcra/final-rule-additions-list-categorical-non-waste-fuels>

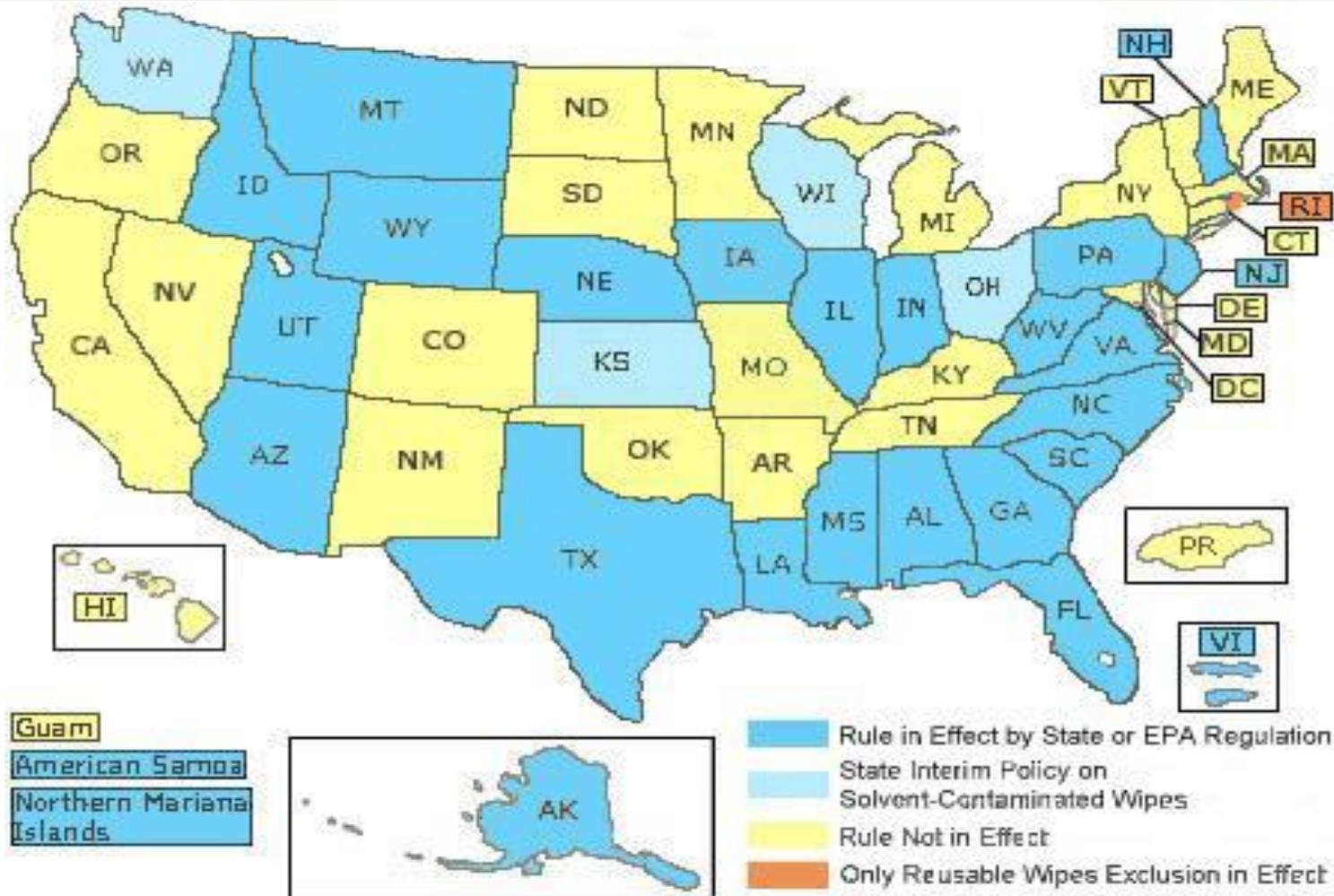


Conditional Exclusions from Solid Waste and Hazardous Waste for Solvent-Contaminated Wipes Final Rule

- The Final Rule was published in the FR on July 13, 2013 (78 FR 46448)
- This Rule is less stringent than previous interpretations
- Most EPA Region 4 States have adopted the Rule
- Tennessee has adopted the Rule but the rule package has not yet been authorized EPA (but the rule is in effect)
- Kentucky has not adopted the Rule



This Map Shows The States Where The Solvent-Contaminated Wipes Final Rule Is In Effect



How the Solvent-Contaminated Wipes Rule is Less Stringent

- Formerly Generators had to manage all wipes destined for disposal as hazardous waste. Disposal options included a hazardous waste landfill or other permitted disposal unit. Reusable wipes faced a myriad of management practices.
- New regulations allow for disposal in a Subtitle D landfill or laundering.
- New requirements include no **“No Free Liquids”**.
- Labeling - Containers of solvent-contaminated wipes must be labeled during accumulation, storage, and transportation as **“Excluded Solvent-Contaminated Wipes”**.
- Accumulation Time Limit - Solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container. Generators must keep documentation that the 180-day accumulation time limit is being met.
- Website: <https://www.epa.gov/hwgenerators/final-rule-2013-conditional-exclusions-solid-waste-and-hazardous-waste-solvent>



Definition of Solid Waste

- The Final Rule went into effect on July 13, 2015 (80 FR 1694)
- The Rule promotes responsible hazardous secondary materials recycling
- Ensures that the hazardous secondary materials are in fact legitimately recycled, rather than illegally disposed of
- **Website:**

<https://www.epa.gov/hwgenerators/final-rule-2015-definition-solid-waste-dsw>



Disposal of Coal Combustion Residuals from Electric Utilities Final Rule

- The CCR Final Rule became effective on October 19, 2015 (80 FR 21301).
- The Rule regulates coal ash waste from coal fired power plants under Subtitle D of RCRA.
- The Rule sets out requirements for coal ash disposal including dust control, groundwater contaminant releases, and preventing the catastrophic failure of any coal ash surface impoundments.
- **Website:** <https://www.epa.gov/coalash>



Proposed Federal Rules



Hazardous Waste Generator Improvement

- Proposed Rule was published in the FR on August 31, 2015 (80 FR 57918)
- EPA anticipates that this Rule will be finalized in October 2016.



Hazardous Waste Export-Import Revisions Proposed Rule

- The Proposed Rule was published in the FR on October 19, 2015 (80 FR 63284).
- The rule proposes:
 - Improved import and export shipment tracking;
 - One consolidated and streamlined set of requirements applying to all imports and exports;
 - Mandatory electronic reporting to EPA; and
 - Linking the consent to export with the exporter declaration submitted to U.S. Customs and Border Protection (CBP).
- The Final Rule is projected to be published in December 2016.
- **Web Site:** <https://www.epa.gov/hwgenerators/proposed-rule-hazardous-waste-export-import-revisions>



Management Standards for Hazardous Waste Pharmaceuticals Proposed Rule

- The Proposed Rule was published in the FR on September 25, 2015 (80 FR 58014).
- Only those pharmaceuticals that are already considered hazardous waste will be covered by the new rule.
- The Rule bans the sewerage of HW pharmaceuticals.
- **Website:**
<https://www.epa.gov/hwgenerators/proposed-rule-management-standards-hazardous-waste-pharmaceuticals>



CERCLA Section 108b for Hard Rock Mining Proposed Rule

- The Proposed Rule is projected to be published in the FR in December 2016.
- EPA defined hard rock mining as the extraction, beneficiation or processing of metals and non-metallic, non-fuel minerals.
- This Rule would require Financial Assurance be required for certain industries.
- Other sectors that are being considered include chemical manufacturing, petroleum and coal products manufacturing, and the electric power generation, transmission, and distribution industries.
- **Website:** <https://www.epa.gov/superfund/superfund-financial-responsibility>



E-Manifest

- E-Manifest extends to all federally and state-regulated wastes requiring manifests
- The use of electronic manifests is optional for users, and authorizes central collection of data from electronic and paper manifests
- EPA is authorized to collect reasonable user fees for all system related costs including development and maintenance
- EPA must conduct annual Inspector General (IG) audits and submit biennial reports to Congress
- EPA must establish a uniform effective date in a states for e-Manifest, and must implement e-Manifest until States are authorized



Closure and Post Closure Care Guidance for TSD Facilities

- A public review of this guidance was online in the first half of 2015
- Post-closure care is required for land disposal units that leave waste in place upon closure
- Current regulations specify that post-closure care starts upon completion of closure and continues for 30 years
- The guidance outline criteria is to adjust the length of PCC





**Recent & Pending Tennessee Hazardous
Waste Regulatory Amendments
Robert S. Nakamoto, P.E., CHMM**

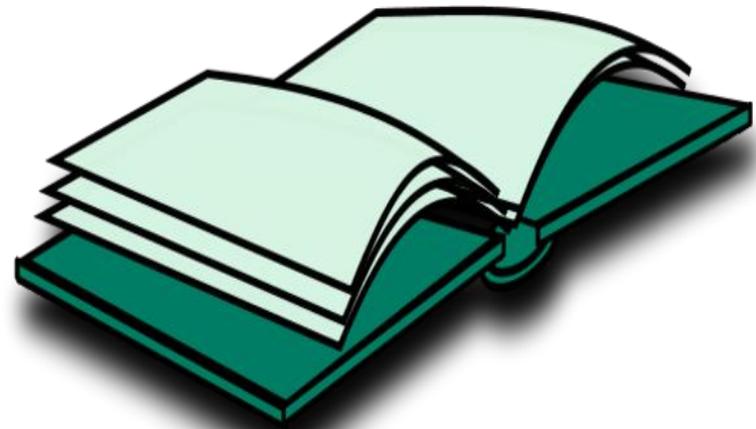
We would like to thank Jackie Okoreeh-Baah & Wayne Gregory of TDEC for providing extensive information for this briefing on the Tennessee Rule Amendments.

April 20, 2016

Hazardous Waste Rulemaking

The Amendments

- Amendment 2014 "a"
- Amendment 2015 "a"
- Amendment 2015 "b"
- Amendment 2015 "c"





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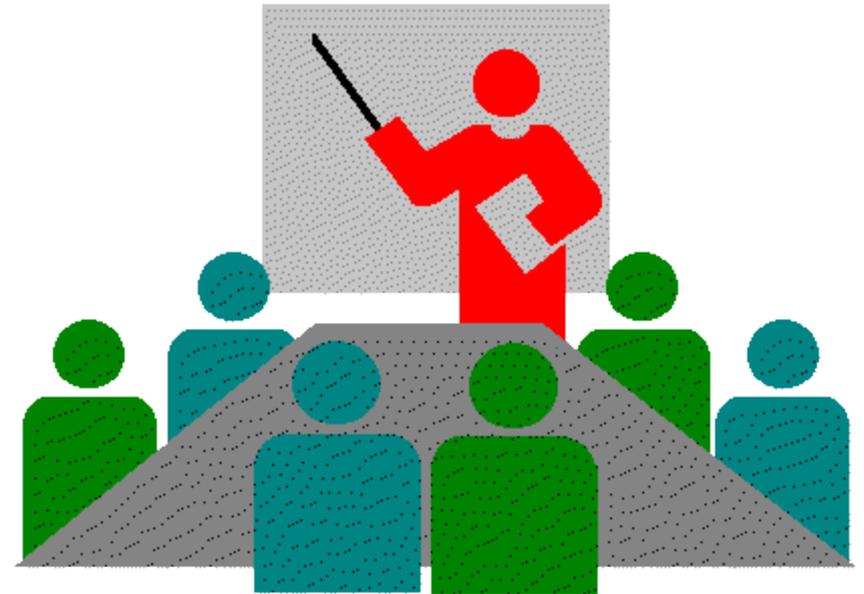
Amendment 2014 "a"
Effective Feb 10, 2015

Amendment 2014 "a"

- Addressed conflicts that resulted from prior rulemakings & typographical errors.
- Restored the recordkeeping requirement for generators to three years throughout the regulations, to reflect EPA and surrounding states.
- Separated the petition process and the variance request to bring clarity and structure to the petitioning process.
- Updated the list of publications referenced by the regulations to be consistent with EPA's updates.
- Clarified ambiguous language to benefit the regulated community

Amendment 2014 "a"

- Amended incorrect public notice procedures in several places.
- Clarified the evaluation process for a generator's request that a waste containing exclusively trivalent chromium should not be managed as hazardous waste.
- Amended the generator regulations to clarify when a generator would be exempt from hazardous waste reduction planning.





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Amendment 2015 "a"
Effective Oct 8, 2015

Amendment 2015“a”

- Adopted the new federal **solvent wipes** rule as is.
- Excludes carbon dioxide from air pollution devices that are injected into Class VI injection wells for the purpose of geologic sequestration (federal revision).
- Allows the eventual use of electronic manifests per recent federal revisions (final federal guidance is pending).
- Incorporates new federal requirements for exporting cathode ray tubes.



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**Amendment 2015 "b"
In Attorney General's
Office for Review**

Amendment 2015“b”

- Corrected a typo in the process description to K107.
- Added a common chemical name 1,1,1-Trichloroethane to the U226 list of commercial chemical products. (Not a new listing.)
- Updated the language regarding the exclusion of comparable fuel and syngas fuel to be equivalent with EPA’s language.
- Corrected the introductory statements in Rule 0400-12-01-.10(1)(g)2(iv) so that it reads like the federal language and to add a sentence to the certification statements.



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Amendment 2015 "c" / The DSW Rule
Ed Callaway, Partner, Waller Law

Definition of Solid Waste

- “Any garbage, refuse, sludge [yada, yada, yada] and other discarded material [yada, yada, yada].” 42 U.S.C. 6902(27)
- The word that matters: **“discarded”**

DSW – Regulatory History

- **1978/80 cycle:** “sometimes discarded”
- **1983/85 cycle:** creates exclusions for certain recycling
- Litigation over what is “discarded”
 - AMC I; API I; AMC II; ABR; API II; Safe Food & Fertilizer
- **2008 Federal Rule:** deregulatory approach, not widely implemented

DSW – 2015 Federal Rule

- Published Jan. 13, 2015; effective July 13, 2015
- Strict exclusion for recycling “under the control of the generator”
- Exclusion for recycling by “verified recycler”
- Legitimacy criteria expanded to all recycling

Overview of 2015 DSW Rule

Codifying a new regulatory definition of the 2008 “contained” standard in order to prevent mismanagement of hazardous secondary materials during storage.

- The unit is in **good condition**, with no leaks or other continuing or intermittent unpermitted releases of the hazardous secondary materials to the environment, and is designed, as appropriate for the hazardous secondary materials, to prevent releases of hazardous secondary materials to the environment.
- The unit is **properly labeled** or otherwise has a system (such as a log) to immediately identify the hazardous secondary materials in the unit; and
- The unit holds hazardous secondary materials that are **compatible with other hazardous secondary materials placed in the unit** and is **compatible with the materials used to construct the unit** and addresses any potential risks of fires or explosions.

Hazardous secondary materials in units that meet the hazardous waste tank and container standards are presumptively contained

Overview of 2015 DSW Rule

- Replacing the transfer based exclusion for hazardous secondary materials with the **verified recycler exclusion**, increasing oversight by the state or EPA and thus preventing unpermitted facilities from receiving hazardous secondary material, unless they have obtained a variance (**or permit**) from the state or EPA.

Overview of 2015 DSW Rule

Codifying the sham recycling prohibition, requiring all four legitimacy factors be met, and requiring legitimacy documentation when the recycled product has elevated levels of hazardous constituents.

The 4 legitimacy factors are:

- Hazardous secondary material must provide a **useful contribution** to the recycling process or to a product or intermediate.
- Recycling must produce a **valuable product** or intermediate.
- Hazardous secondary material must be **managed as valuable commodities**.
- The product of recycling must be **comparable to a legitimate product** or intermediate

Amendment 2015“c”

State Proposed Changes

- **Added definitions and clarifying notes using information found in the Preamble and other EPA documents.**
 - **Analogous Raw Material**
 - A material for which a hazardous secondary material substitutes and which serves the same function and has similar physical and chemical properties as the hazardous secondary material.
 - **Hazardous Secondary Materials Acceptance Plan**
 - The plan used by the verified reclaimer or the verified intermediate facility that identifies the physical and chemical data necessary to determine if a hazardous secondary material is being legitimately reclaimed.

Amendment 2015“c”

- **State Proposed Changes – Added Definitions**
 - **Intermediate**
 - When used in the context of a chemical reaction means a chemical substance either formed by chemical reaction or is purchased and quantitatively introduced in a chemical reaction to support the formation of a product. Multiple intermediates may be associated with a chemical reaction.
 - **Spent Material**
 - The term includes any material that has been used and is no longer fit for use without being regenerated, reclaimed or otherwise reprocessed.
 - Contamination, as used in the definition, includes any impurity, factor, or circumstance which causes the material to be taken out of service.

Amendment 2015“c”

- **State Proposed Changes – Added Definitions**
 - **By-Product**
 - The term by-product includes residues that result from manufacturing or other operation that are not one of the primary products that are produced.
 - The term “co-product” means a material produced for use by the general public and suitable for end use essentially as-is.
 - **Commercial Chemical Products**
 - Unused commercial chemical products and manufactured articles that are not listed and exhibit a characteristic of hazardous waste have the same status as listed commercial chemical products when legitimately recycled. That is, they are not solid waste, except when they are recycled in ways that differ from their normal manner of use.

Amendment 2015“c”

- **State Proposed Changes – Added Definitions**
 - **Return Loop Exclusion**
 - A clarification added that the term “production process” includes activities that tie directly into the manufacturing operation or those activities that are the primary operation at the establishment.

Amendment 2015“c”

State Proposed Changes

- **Clarified TDEC’s verification determination for the verified reclaimer and intermediate facility.**
 - Uses its own determination procedure.
 - Includes that same criteria as EPA plus a hazardous secondary material acceptance plan.
 - Is the same procedure as for issuing a variance.
 - Restricts the verified reclaimer and intermediate facility to accepting only hazardous secondary material verified in its hazardous secondary material acceptance plan.
 - Requires verified reclaimers and intermediate facilities to send confirmation of receipt of hazardous secondary material within 30 days of receipt.

Amendment 2015“c”

State Proposed Changes

- Modified the financial assurance requirements applicable to verified reclaimers and intermediate facilities from the federal language to be compatible with Tennessee requirements and experience.

PROPOSED HAZARDOUS AND SOLID WASTE REGULATIONS FOR GENERATORS

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Proposed Hazardous Generator Rule

September 25, 2015 at 80 FR 57918

Major Elements of the Proposed Rule Change

- Consolidates all generator categories into Part 262 of the regulation - CESQG becomes VSQG (very small quantity generator);
- Allows for alternative standards for “Episodic Generators” such that an VSQG could remain in that status if more than 100 kg of non-acute HW was generated IF notifications and alternate management standards are met;
- VSQGs and SQGs would be able to send their wastes to an LQG that is not permitted if it is under the control of the same entity. Again, very specific management requirements must be followed;
- Imposes new labeling requirements on all generators;
- Directly addresses the generator’s responsibility to characterize all solid wastes and maintain documentation; and
- Imposes additional reporting and notification requirements on large quantity generators (LQGs)

Issues of this Rulemaking to be Discussed in this Presentation

- Applicability in Tennessee
- Less stringent proposals
- Waste Characterization Requirements
- Substantive Labeling Changes for all Generators
- New Reporting and Notification Requirements for small and large quantity generators
- **Enforcement:** Independent Requirements vs. Conditions for Exemption

Applicability

This is a non-HSWA rulemaking. In states with authorized programs, including Tennessee, the rule will not be effective until the state adopts the rules. The state is not required to adopt less stringent requirements but is required to adopt more stringent requirements. In Tennessee, the effective date would likely be 1–2 years after the federal effective date.

Current Requirements that Are Less Stringent

- LQGs may request a waiver from the 50-ft buffer zone for ignitable/reactive waste from the local fire department.
- Containers in satellite accumulation areas can be vented if/when necessary to ensure proper operation of related equipment – but, the container labels must also include indication of hazards present as well as the word hazardous waste or other identification of contents.
- For Contingency Plan, identify a 24/7 Emergency Coordinator by position instead of by name.

WASTE CHARACTERIZATION REQUIREMENTS

- The proposed rule requires written documentation to demonstrate the basis of each solid waste characterization.
- Characterization based on analyses for a hazardous waste characteristic conducted on representative samples results in a non-refutable compliance method.
- Documentation that **MUST** be kept
 - Results of any test, sampling, or waste analyses;
 - Records documenting the tests, sampling, and analytical methods including QA/QC and the relevance of such tests;
 - Records consulted in order to determine the process by which the waste was generated if based on process knowledge; and
 - Records indicating the composition of the waste and properties of the waste (startup, shutdown, upsets).

New Labeling Requirements Applicable to all Tanks, Containers, Drip Pads and Containment Buildings

Label Requirement	Current LQG	Proposed LQG	Current SQG	Proposed SQG	Current SAA	Proposed SAA
Words "Hazardous Waste"	Yes	Yes	YES	YES	Yes, or Id of contents	YES
Identify Contents	NO	YES	NO	YES	Yes, or Hazardous Waste	YES
Identify Hazards	NO	YES	NO	YES	NO	YES
Waste Codes	NO	Prior to Shipment	NO	Prior to Shipment	No	NO
Accumulation Start Date	Yes	Yes	YES	Yes	Above 55 gallons	Above 55 gallons

Additional Requirements

- SQG must maintain written inspection logs just as LQGs
- Mandatory re-notification in alternate years for SQGs as well as LQGs
- EPA is re-evaluating the current training requirements (i.e. LQGs should train people managing satellite areas)
- LQGs must notify when they plan to close a 90 day accumulation area.
- SQGs MUST have written arrangements with local authorities for emergency response as LQGs are required
- Requires new LQGs to prepare an extensive executive summary of contingency plans to the LEPC
- Makes written arrangements/agreements with LEPC or hospitals, law enforcement, fire response agencies mandatory for SQGs and LQGs.

The “NUCLEAR OPTION”

Independent Requirements vs. Conditions for Exemption

The preamble discusses at length the fact that lapses in compliance with exclusion conditions (i.e. 90 day storage without a permit) allowing lesser management standards could potentially result in the generator being found to be an “Illegal and Unpermitted” hazardous waste storage facility. Such lapses would include:

- Lack of proper label
- Accumulation of a single container for 92 days
- Container not properly closed
- Inadequate aisle space

Questions???

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