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# RAM Storage

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And the Two-Year  
Storage Rule

# RAM Storage Rule

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## What rule?

- 25 TAC §289.252(x)(11)
- Rule effective March 2016
- Enforcement discretion
  - Violation issuance delayed for two years
  - Allow licensees time to comply with rule

<https://dshs.texas.gov/radiation/ram/laws-rules.aspx>



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# RAM Storage Rule

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## Extension of existing rules

- Related to site decommissioning requirements
- Fills the gap when the site is still being used for principle activities listed on license
- Addresses disposal component



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# RAM Storage Rule

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## 25 TAC §289.252(x)(11)

- Four parts to rule
  - Identifies RAM and time limit
  - Allows for standby for future use
  - Allows for alternative disposal timeframe
  - Plan submission timeframe



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# Rule Text

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## 25 TAC §289.252(x)(11)

- Licensees shall not hold radioactive waste, sources, or devices not authorized for disposal by decay in storage, and that are not in use for longer than 24 months following the last principal activity use...



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# Rule Text

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## 25 TAC §289.252(x)(11) cont.

- ... Sources and devices kept in standby for future use may be excluded from the 24-month time limit if the agency approves a plan for future use. ...



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# Rule Text

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## 25 TAC §289.252(x)(11) cont.

- ... A plan for an alternative disposal timeframe may be submitted by the licensee if the 24-month time limit cannot be met...



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# Rule Text

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## 25 TAC §289.252(x)(11) cont.

- ... Licensees shall submit plans to the agency at least 30 days prior to the end of the 24 months of nonuse.



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# Disposal

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## Why dispose of RAM?

- No longer needed
- Prevent loss of control
- Reduce potential exposure of workers and public
- Preclude contamination from spills or leaks
- Preclude unauthorized disposals



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# Health and Safety

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## Issues with undisposed RAM

- Potential site contamination
- RAM not properly disposed resulting in contamination events
- Radiation exposures from unsecured RAM sources in public domain
- Excess doses to workers and public
- Impedes site termination closure



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# RAM License

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## License listing of RAM

- Radioisotope
- Chemical/Physical Form of Material
- Maximum Activity
- Authorized Use
  - Identifies the principle activities



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# Licensed Material

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## “Principle Activities” defined

- 25 TAC §289.201 (b)
- Activities authorized by the license that are essential to achieving the purpose(s) for which the license was issued or amended.
- Storage during which no licensed material is accessed for use or disposal and activities incidental to decontamination or decommissioning are not principal activities.



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# Decommissioning

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## 25 TAC §289.252(y)

- “Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas.”



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# Decommissioning

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## 25 TAC §289.252(y)(4)

- Within 60 days of the occurrence of any of the following, each licensee shall provide notification to the agency in writing and either begin decommissioning its site, or any separate building or outdoor area that contains residual radioactivity, so that the building and/or outdoor area is suitable for release in accordance with §289.202(eee) of this title, ... if:



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# Decommissioning

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## 25 TAC §289.252(y)(4)

- (B) the licensee has decided to permanently cease principal activities, as defined in §289.201(b) of this title, at the entire site or in any separate building or outdoor area;
- (C) no principal activities at an entire site as specified in the license have been conducted for a period of 24 months;



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# Rule gap

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## RAM Site vs RAM

- Rule for license or site termination and decommissioning applies to entire site or in any separate building or outdoor area
- What if part of the area is still used?
- What about the unused waste, sealed sources and devices?
- Health and safety issues from RAM not the location of use



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# Rule Gap Coverage

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## Back to §289.252(x)(11)

- Rule requires the disposal of RAM waste, sources or devices no longer in use for longer than 24 months following last principle activities use
- Rule is RAM specific not use location specific
- Preclude legacy RAM waste, source and device issues encountered during site termination or decommissioning process



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# But what about ...

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## Standby for future use

- Must have and submit a definite plan for future use of sources and devices
- Must present timeframe and specific principle activity use
- The agency will review proposed timeframe and principle activity use



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# But what about ...

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## Alternative disposal timeframes

- The RAM waste, sources or devices may not have readily available disposal options
- There may be limited access to the sources or devices for removal
- Required to submit amendment request identifying disposal timeframes issues
- The agency will review alternative disposal timeframe request



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# And when do I ...

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## Submit these plans

- Licensee must submit a radioactive materials license amendment request at least 30 days prior to the end of the 24 months of principle activity nonuse



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# What happens if ...

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## When request is approved

- The agency will issue a license amendment with a license condition specific to the requested item(s)
- The license amendment most likely will have a time limit specific to the proposed time frames submitted



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# What happens if ...

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## When request is denied

- The agency will notify the licensee in writing of the decision to deny the amendment request
- The agency will notify the licensee of the requirement to dispose or otherwise transfer the RAM identified in the request



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# Summary

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## RAM Storage Time Limit

- Licensee must dispose of RAM waste, sources or devices that have not been used in the past 24 months
- Licensee may request exclusion from the 24 month requirement of future use of sources and devices or alternative disposal time frames
- Storage rule is in place for public health and safety purposes



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# Impact of Rule

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## Outcomes

- Marked increase in the number of SCATR requests in 2019
- Financial assurance requirements enhanced
- Impetus to dispose of unused sources



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# Impact of Rule

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## Outcomes

- ~ 10 licensees have been granted a 2-year extension due to budget issues
- Issued over 30 violations since March, 2018
- Some licensees with smaller sources (check sources, gauges) and waste, were able to properly dispose
- Discovered some applied and received license & never purchased a source



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# What Do We Do?

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## AM 241 Sources

- Identified ~ 300 licensees authorized for AM-241.
- GLA's (fill level & density gauges, thickness gauges, x-ray fluorescence devices)
  - Doesn't include broad scope licenses or service providers
  - ~ 69 authorized between 31 & 300 mCi



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# What Do We Do?

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## Facility #1

- Currently in decommissioning
- ~20-40 americium sources remaining
- Foreign source or cannot be properly identified, other than the isotope
- Lack sufficient ID/markings so they cannot be returned to manufacturer
- Not eligible for normal disposal routes due to classification
- Fate of these sources is pending



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# What Do We Do?

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## Facility #2

- Violation was issued
- Not eligible for normal disposal routes due to material classification
- Loose material
- Given multiple extensions



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# Financial Assurance

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## Not adequately addressed

- GLA's have a variety of sources
- Don't require financial assurance
- Financial assurance is compatibility D under NRC regulations
- Large refinery – not required to have financial assurance
- Site that wasn't required to have financial assurance



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# Life is Good

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## For Now...

- TX is currently having a boom, but it always shifts
- What happens when a company goes bankrupt?
- Shell game – can legally transfer from one licensee to another
- How do we shift the focus?



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# Questions?

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