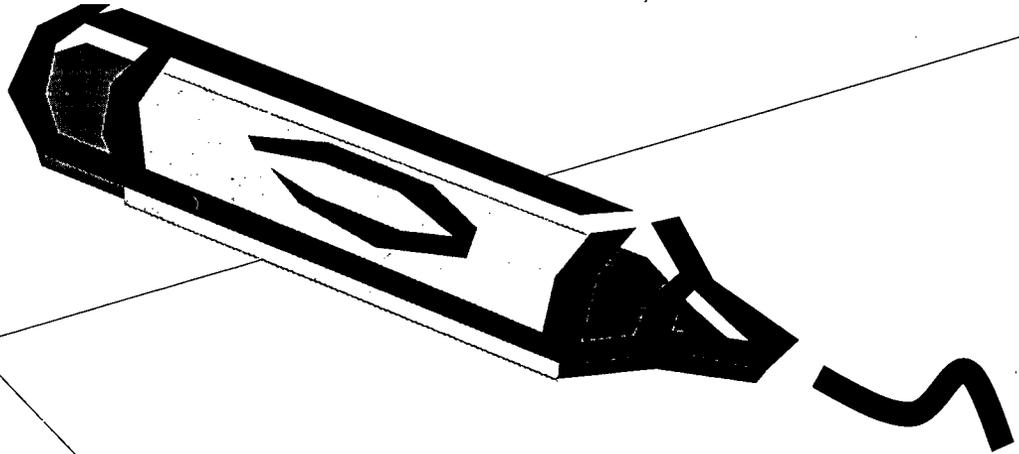
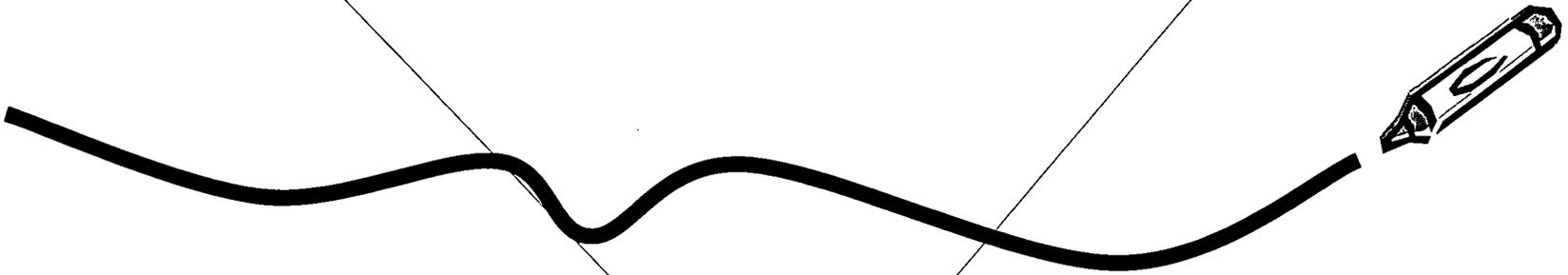


Page 17

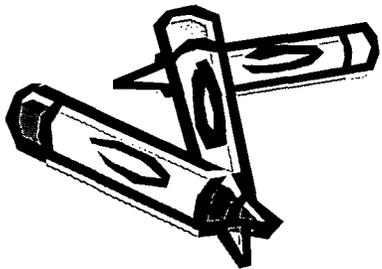
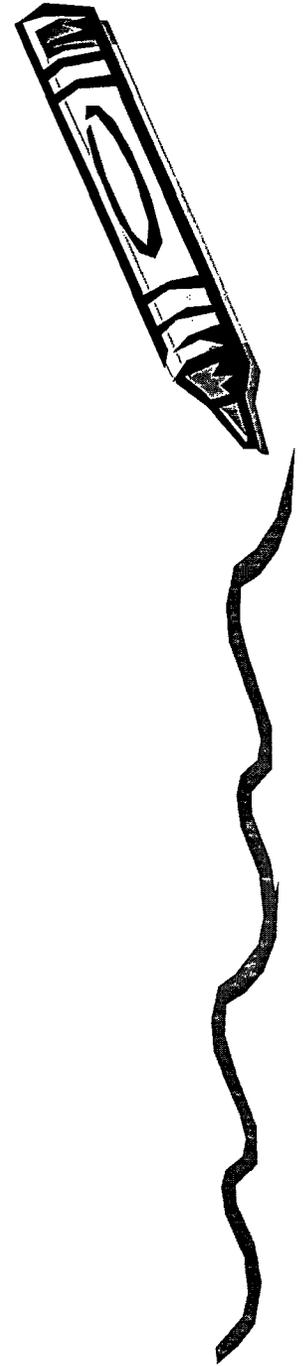


SRAs Present



Risk Myth Busters

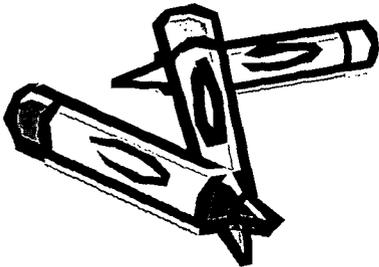
Episode 7



Today's Myth

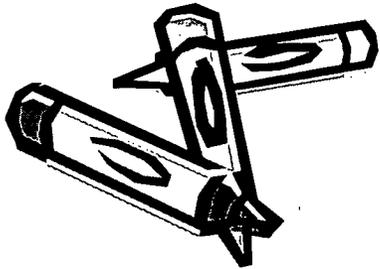
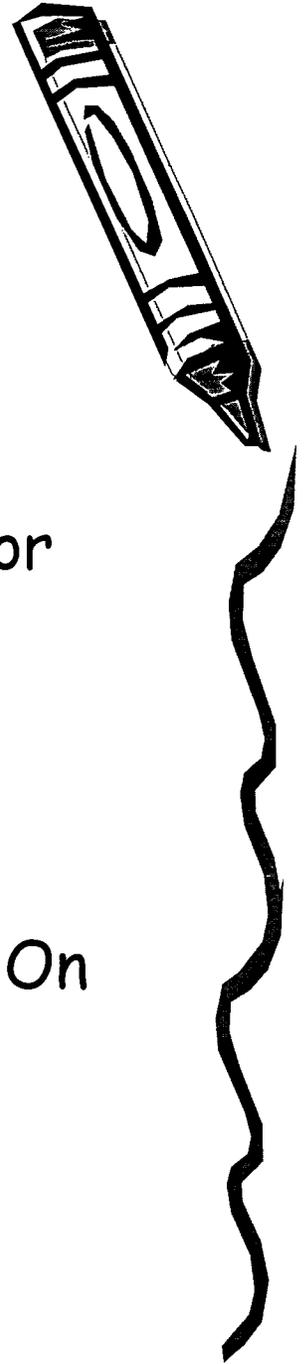
Category: Inspection Report Documentation

Myth: "Inspectors need only to identify findings; it is up to their Branch Chief or the SRAs to ensure they have documented the findings properly."



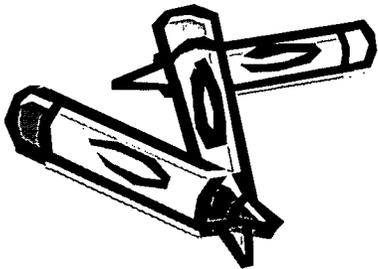
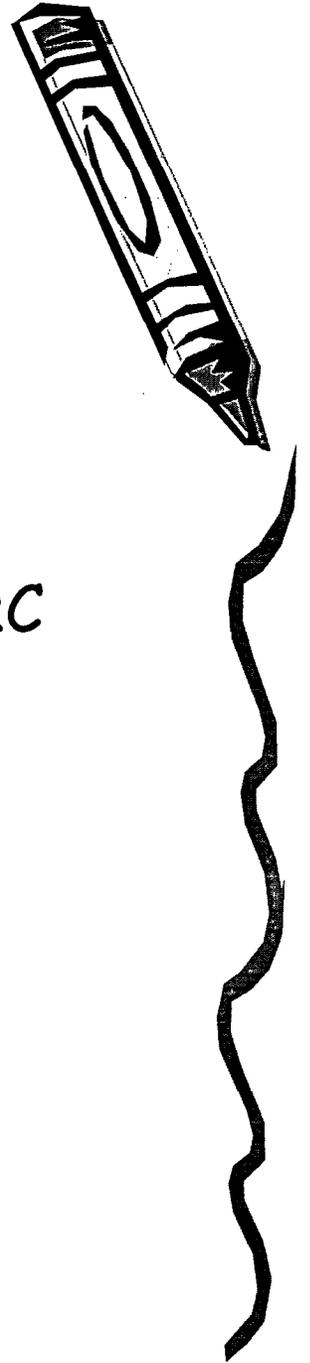
Where do you find guidance ?

- Inspection Manual Chapter 0612, "Power Reactor Inspection Reports," dated 11/02/2006.
- Inspection Manual Chapter 0609, Appendix A, "Phase 1 Screening Worksheet," dated 11/22/2005.
- DRP/DRS Policy No. 17/1040, "DRP/DRS Policy On Inspection Report Quality Review," 2/1/07.

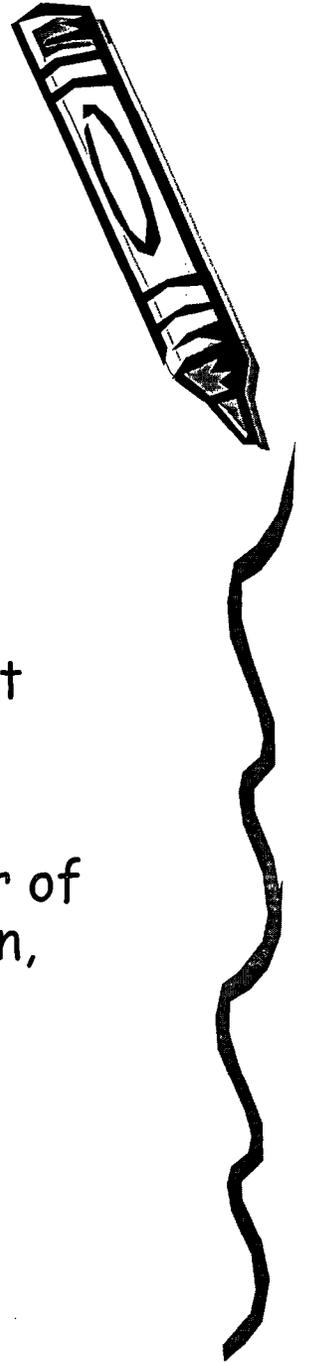


Why do we care about all this time consuming bureaucratic paperwork?

- To clearly communicate significant inspection results in a consistent manner to licensees, NRC staff, and public.
- To document the basis for significance determinations and enforcement actions
- To provide inspection results input to the Operating Reactor Assessment Program (IMC 0305)



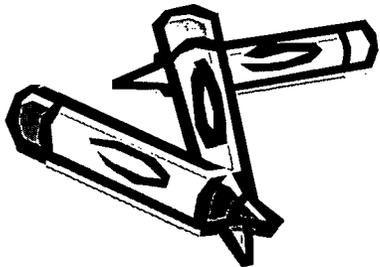
Lets refresh your knowledge of the IMC 0612 documentation requirements.



From Section 0612-06 "Writing Inspection Details" -
"The Details section of routine and integrated NRC inspection reports must conform to the standard format described in this section."

From Paragraph 06.03 -

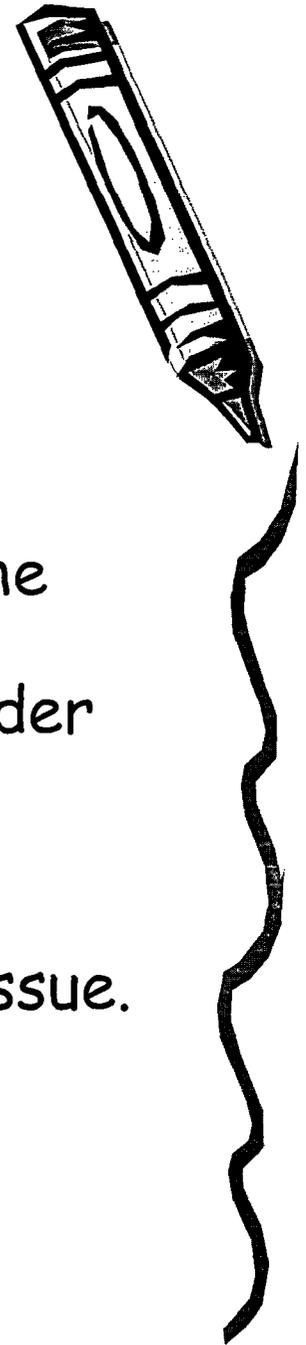
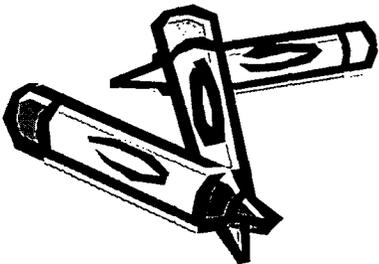
Present the findings within each report section in order of importance. **USE A FOUR PART FORMAT** - introduction, description, analysis, and enforcement.



Analysis Content

Key Elements to include (see para 06.03c)

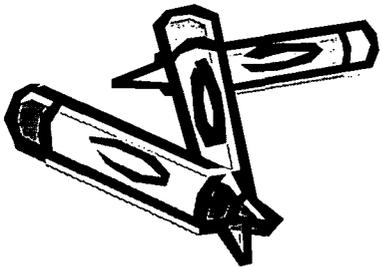
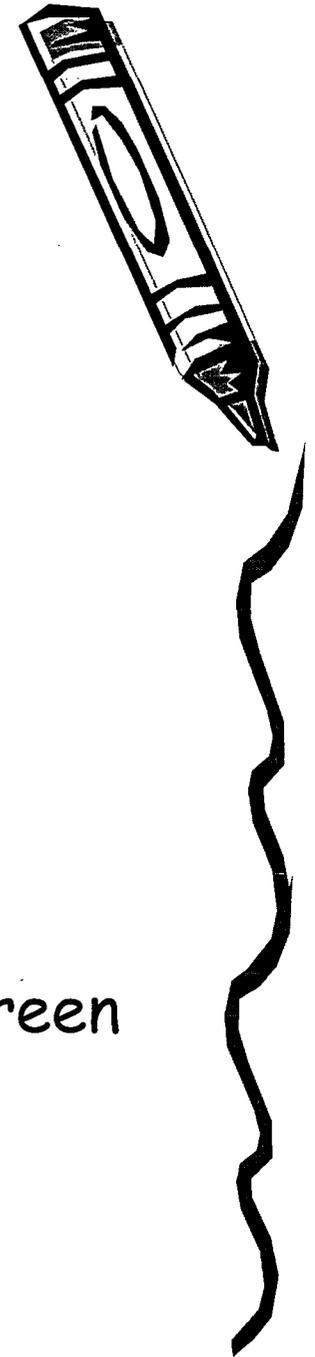
- 1) description of the logic used to determine the significance;
- 2) enough detail to permit a knowledgeable reader to reconstruct the decision logic;
- 3) why it is important; and
- 4) describe any positive performance that mitigates the significance of the problem or issue.



Additional Analysis Details

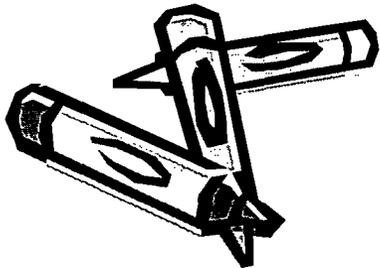
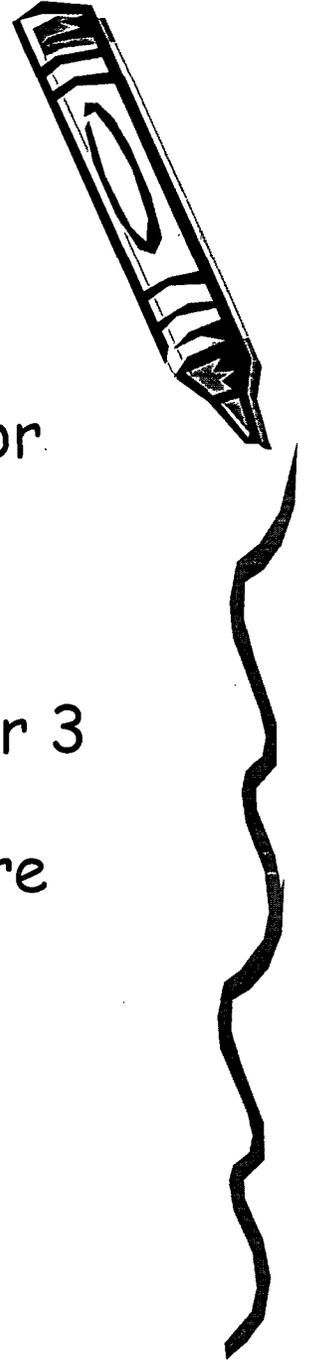
include: (For findings evaluated using SDP Appendices A, F, G, H or K):

- For Phase 1 Screen to Green findings, the inspector needs to document:
 - Affected cornerstone
 - Set of conditions that make it > minor
 - Any assumptions used
 - Phase 1 question satisfied that makes it Green



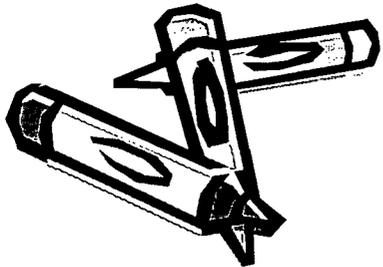
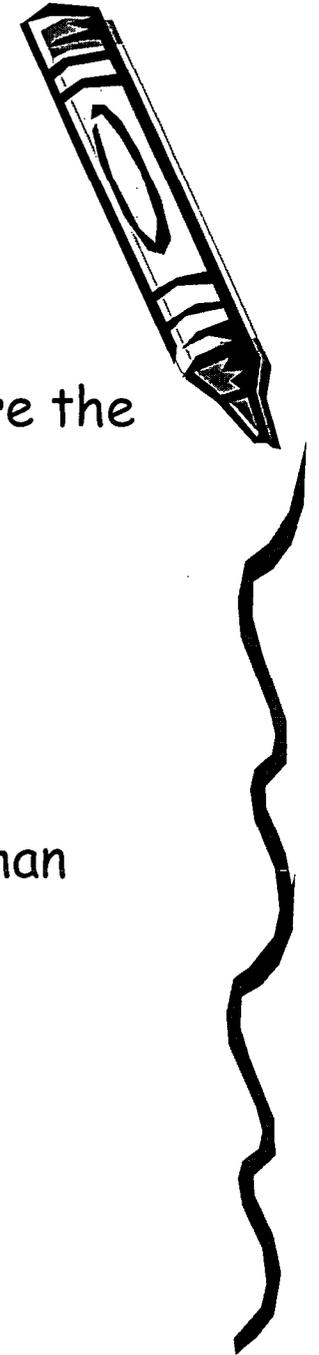
Analysis Details (continued)

- For Phase 2 or 3 Green findings, the inspector needs to document:
 - Affected cornerstone;
 - Set of conditions that make it > minor;
 - Phase 1 criteria that caused the Phase 2 or 3 assessment to be performed;
 - Any assumptions; recovery credit; exposure time
 - Most dominant core damage sequences, including remaining mitigation capability.



Analysis Details (continued)

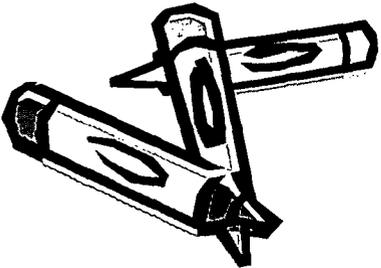
- For Greater than Green findings, the SRAs will prepare the Analysis Section, and it will include, as a minimum:
 - Risk characterization, as approved by the SERP
 - Exposure time;
 - Risk assessment assumptions;
 - Recovery credit, if any;
 - Dominant sequences contributing to the Greater than Green risk significance;
 - Comparison with licensee results.



Analysis Details (continued)

For non-risk informed SDP results:

- Affected cornerstone;
- Set of conditions that make it > minor;
- SDP, and table or flowchart used;
- Any assumptions used;
- Narrative description of the path to arrive a a conclusion.



Is the Myth True or False?

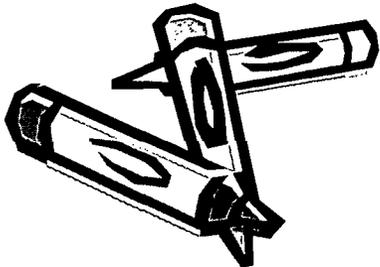
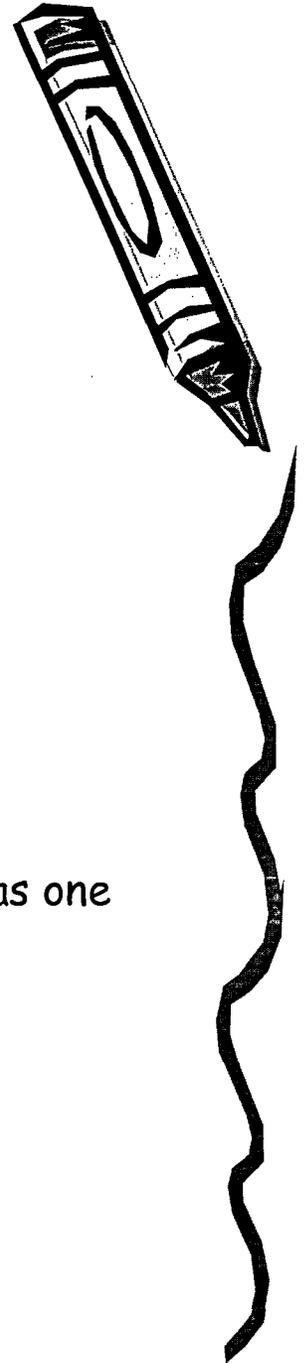
"Inspectors need only to identify findings; it is up to their Branch Chief or the SRAs to ensure they have documented the findings properly."

Did you answer True?

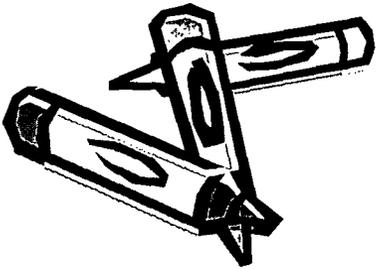
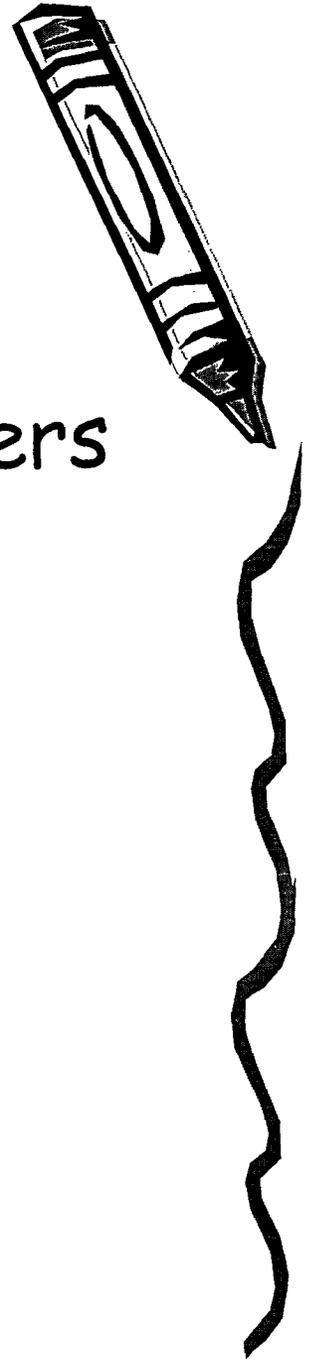
Sorry, wrong answer. Oh, by the way, did you know your were targeted as one of the solutions to coping with the Continuing Resolution.

Did you answer False?

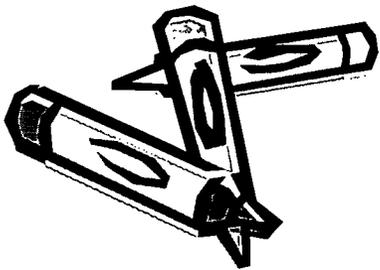
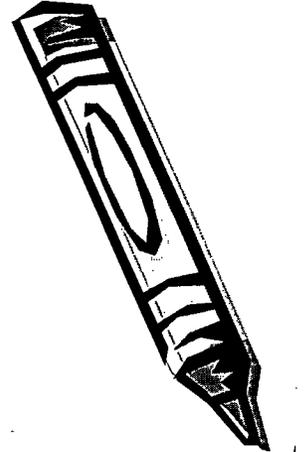
Thank you for paying attention, and I hope this presentation has been refreshing and helpful.



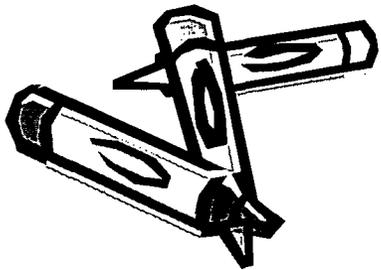
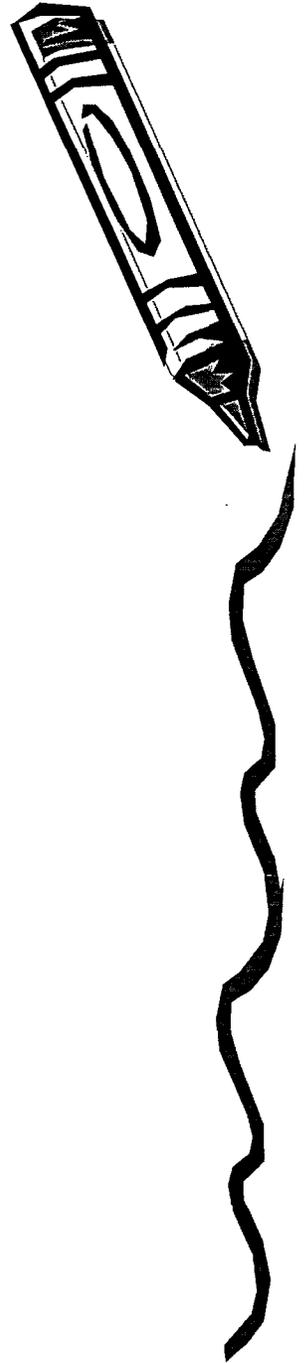
Stay tuned for the next exciting
episode (No. 8) of Risk Myth Busters
when we will reveal.....



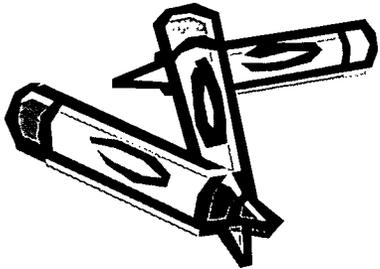
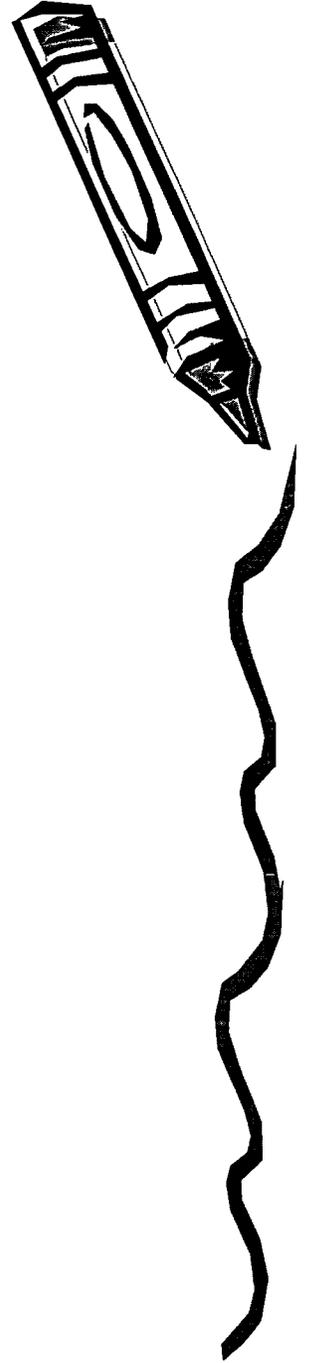
The Secrets of Management Review...

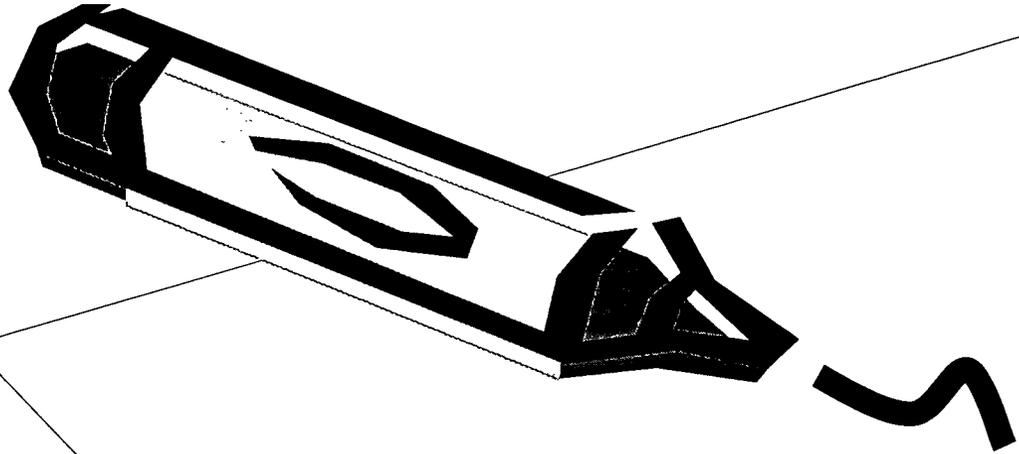


..... and the details, as outlined in recently issued IMC 0609, Appendix M, "Significance Determination Process Using Qualitative Criteria."

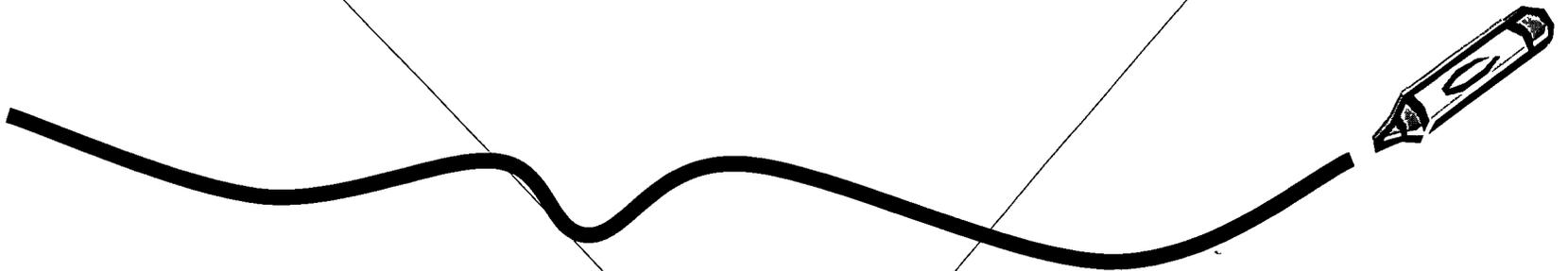


The End



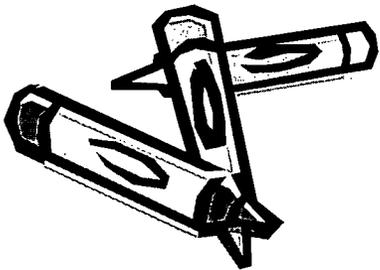
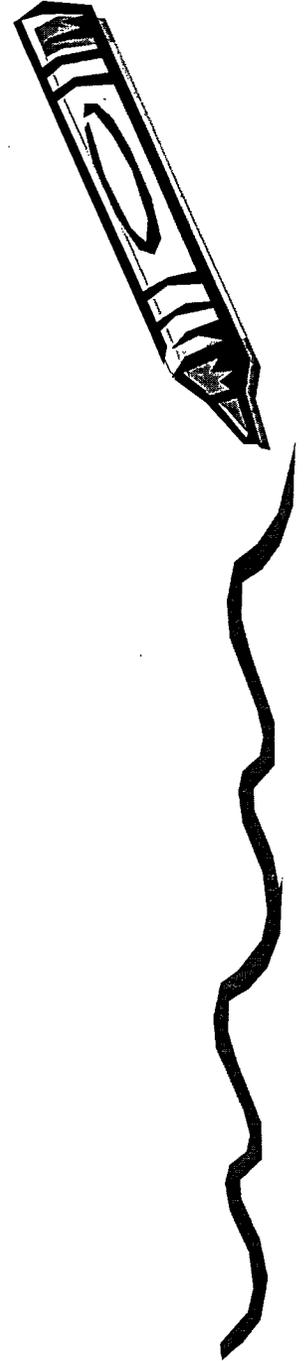


SRAs Present



Risk Myth Busters

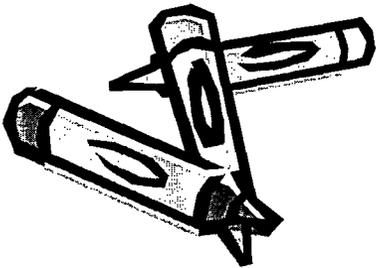
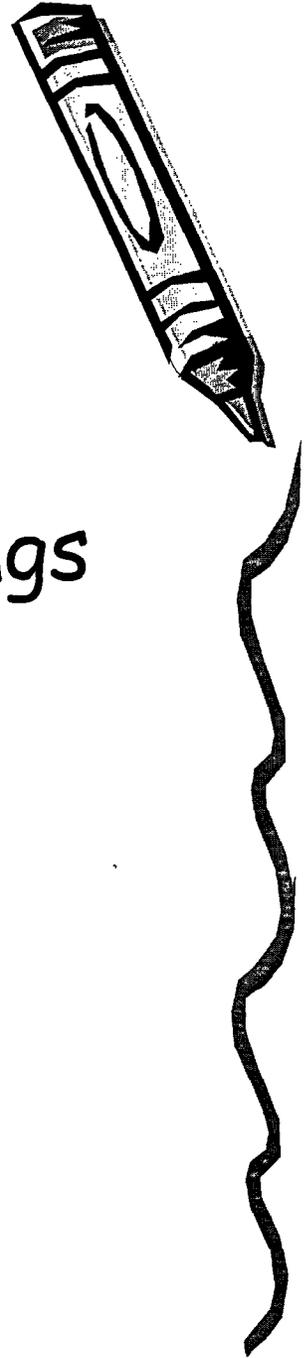
Episode 5



Today's Myth

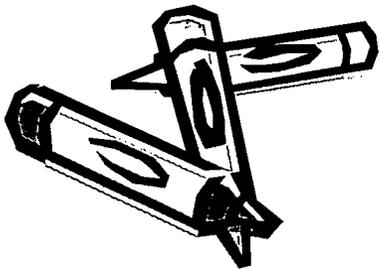
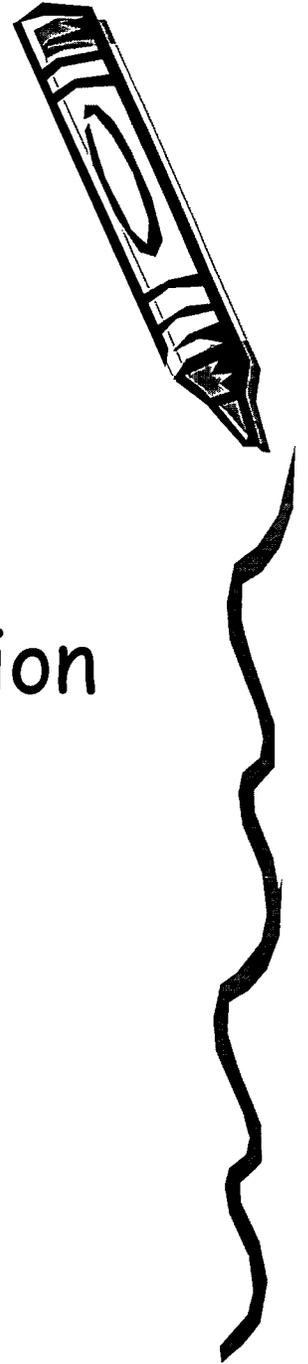
Category: Risk Significance Findings

Myth: "All greater than Green findings are treated the same."



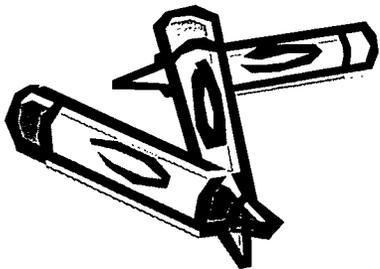
Did you Know?

"All NRC inspectors are required to assess the significance of inspection findings in accordance with the guidance provided in this Manual Chapter [0609]."



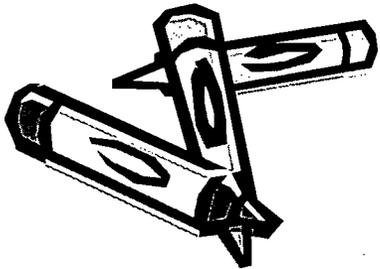
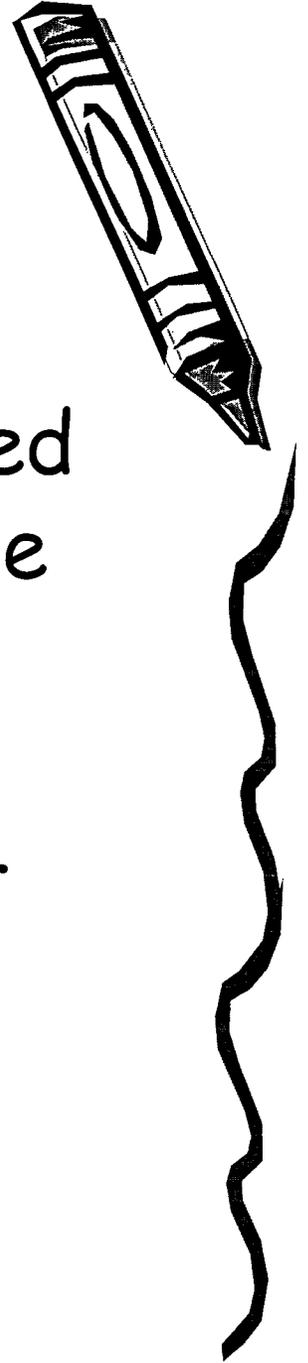
Why?

"The safety significance of findings, combined with the results of the performance indicator program are used to define a licensee's level of safety performance, and to define the level of NRC engagement with the licensee."



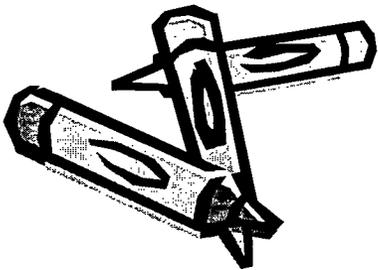
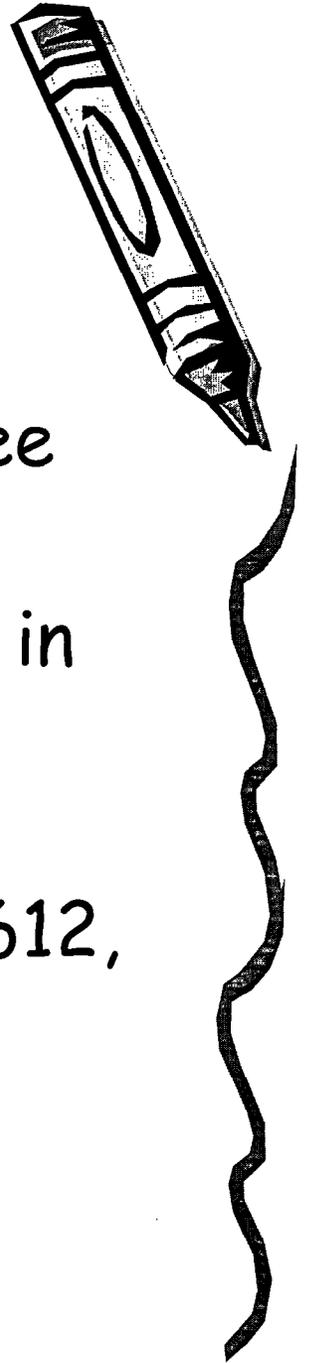
Initial Screening

- Each finding must first be examined using IMC 0612, Appendix B, "Issue Screening," and Appendix E, "Examples of Minor Issues."
- Findings screened as minor are not subjected to the significance determination process.



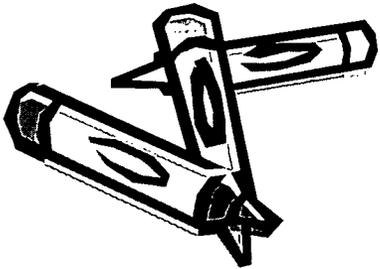
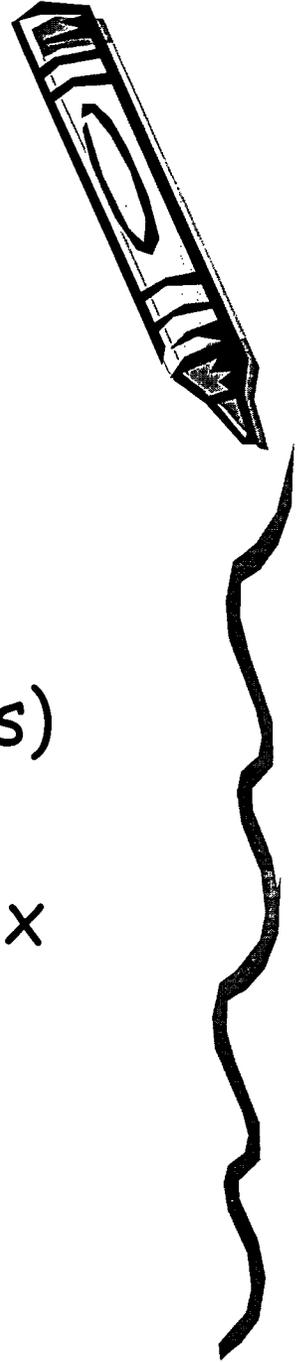
Finding Development (General)

- Findings are discussed with the licensee throughout the inspection process.
- Significance determination performed in parallel with development of the facts surrounding the finding.
- Documentation consistent with IMC 0612, (as you go, recommended).



Initial Characterization of Significance

- Initial significance determination is performed by the inspector.
- At power (IE, MS, Barrier Cornerstones) Phase 1 Screening Worksheet used
- OR, the appropriate IMC 0609 Appendix for findings impacting the other Cornerstones



Risk Metrics

Green Finding: very low safety significance

($\text{delta-CDF}_{\text{total}} < 1\text{E-}6$, $\text{delta-LERF} < 1\text{E-}7$)

White Finding: low to moderate safety significance

($\text{delta-CDF}_{\text{total}} 1\text{E-}6 - 1\text{E-}5$, $\text{delta-LERF} 1\text{E-}7 - 1\text{E-}6$)

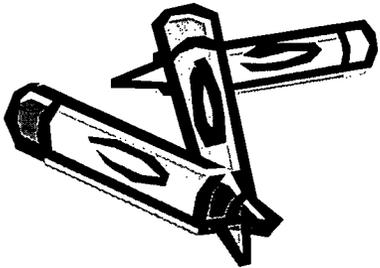
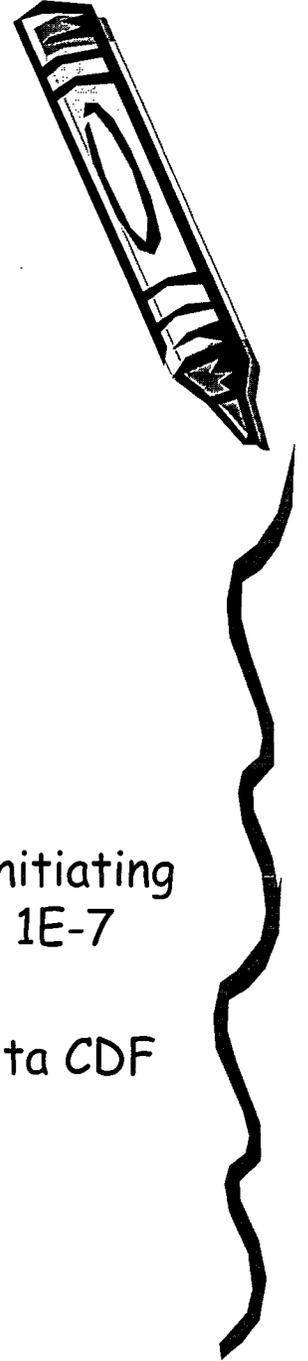
Yellow Finding: substantial safety significance

($\text{delta-CDF}_{\text{total}} 1\text{E-}5 - 1\text{E-}4$, $\text{delta-LERF} 1\text{E-}6 - 1\text{E-}5$)

Red Finding: high safety significance

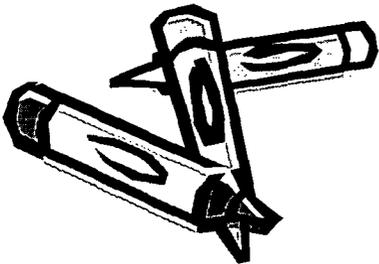
($\text{delta-CDF}_{\text{total}} > 1\text{E-}4$, $\text{delta-LERF} > 1\text{E-}5$)

- The $\text{delta-CDF}_{\text{total}}$ includes the contribution from external initiating events, if the internal delta-CDF is greater than or equal to $1\text{E-}7$ per year.
- The delta-LERF is evaluated if the internal and external delta CDF is greater than or equal to $1\text{E-}7$ per year



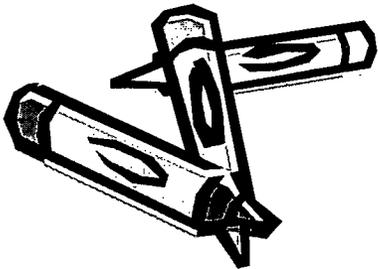
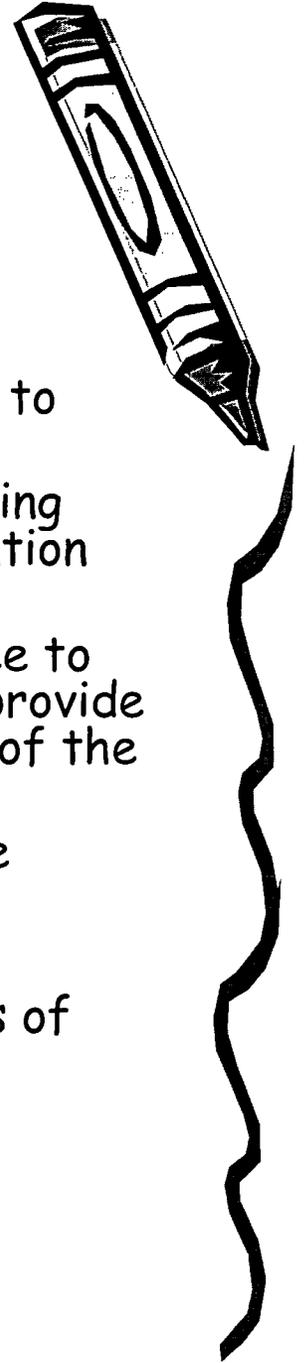
Potentially >Green

- If not already aware of issue, engage the Region I SRAs
- SRAs discuss the finding's risk significance with the licensee's PRA staff
- Inspectors and SRA prepare the SERP package
- SERP review and concurrence (informational 90-day SERP to final risk determination clock starts)



Potentially >Green (Continued)

- Exit meeting and preliminary characterization of the finding to licensee management
- Issue report with clear and complete description of the finding and the basis for the preliminary risk significance determination (90-day SDP clock starts)
- Inspection report cover letter offers a choice to the licensee to present further information at a regulatory conference, or provide a written response, or to accept the NRC's characterization of the finding, as written.
- Regulatory Conference (public), if requested, and/or licensee written response.
- Final SERP, if necessary.
- Issue NRC Final Risk Determination letter (all within 90 days of the report being issued)



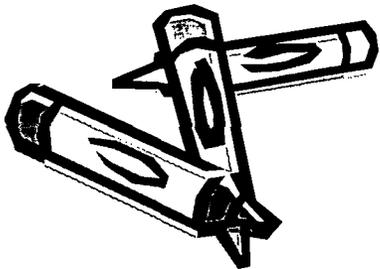
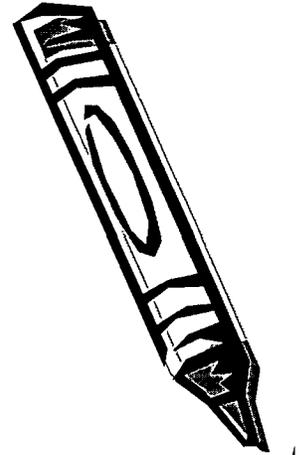
Is the Myth True or False?

Did you answer False?

Sorry, wrong answer.

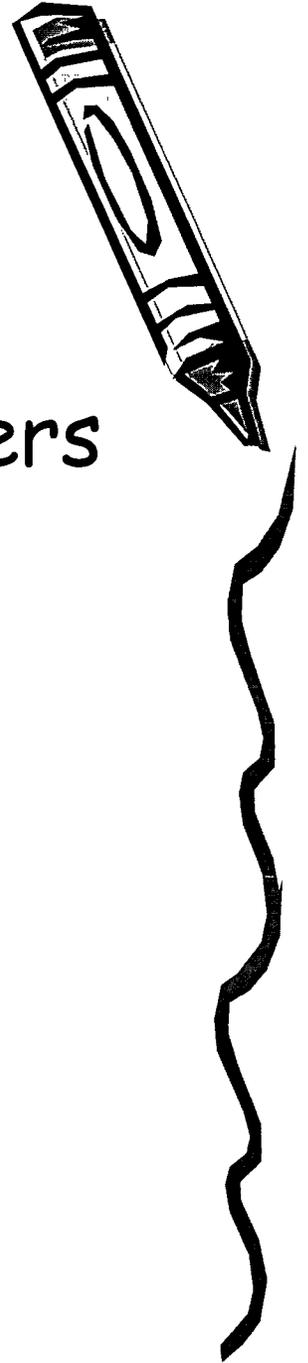
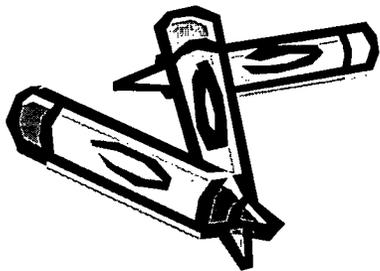
Did you answer True?

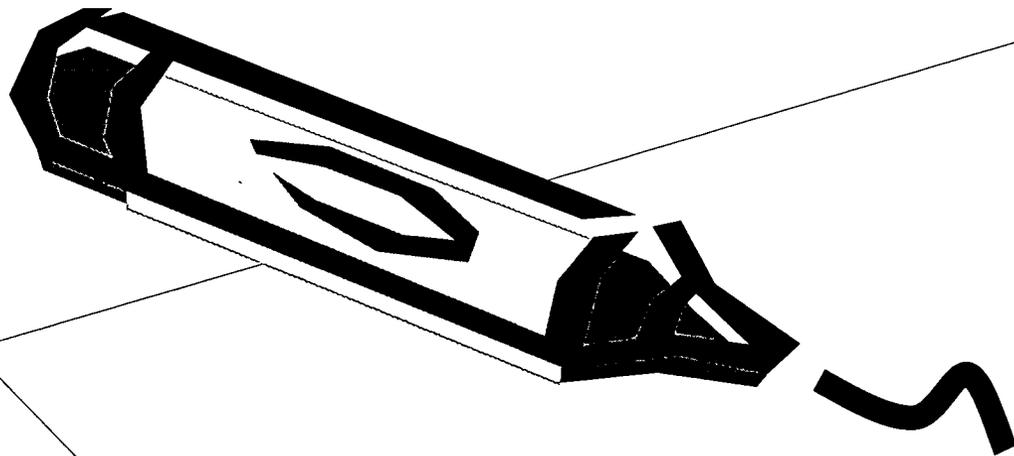
Correct. All greater than Green findings are subject to the same level of Agency review/scrutiny.



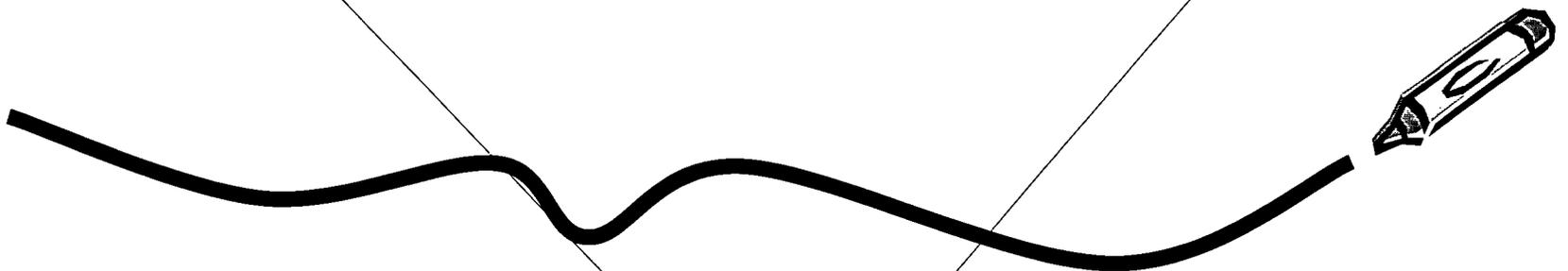
Stay tuned for the next exciting episode (No. 6) of Risk Myth Busters when we will review....

"The major steps involving the performance of a Phase 2 risk significance determination."



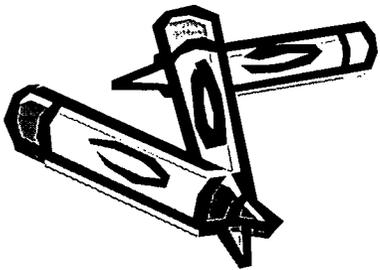
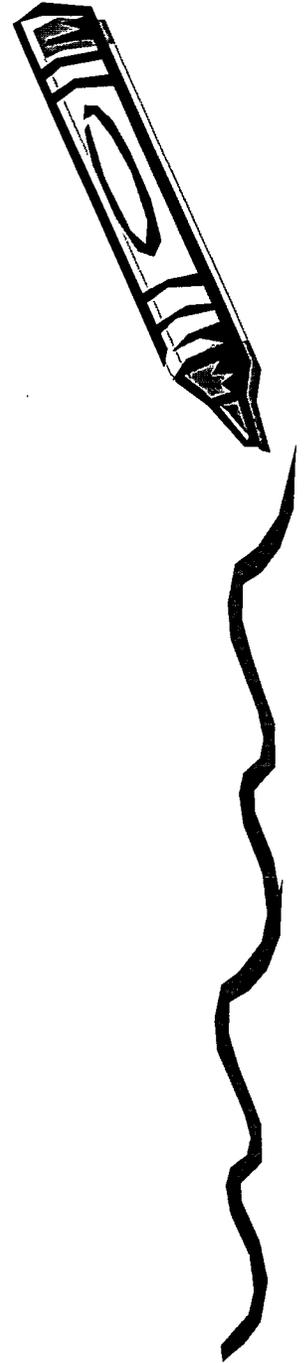


SRAs Present



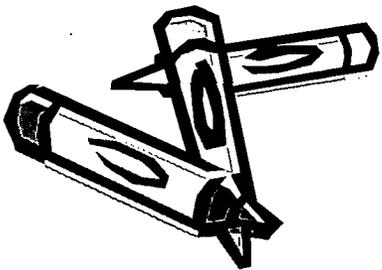
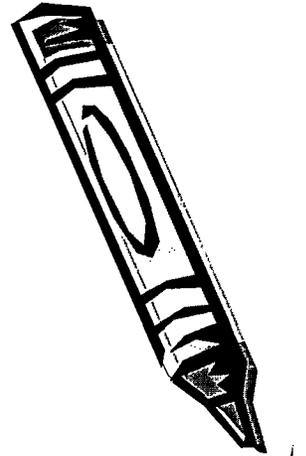
Risk Myth Busters

Episode 6



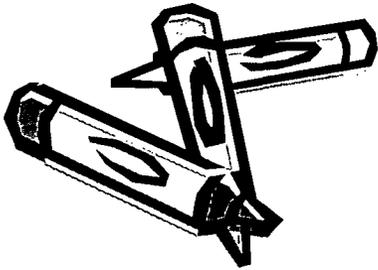
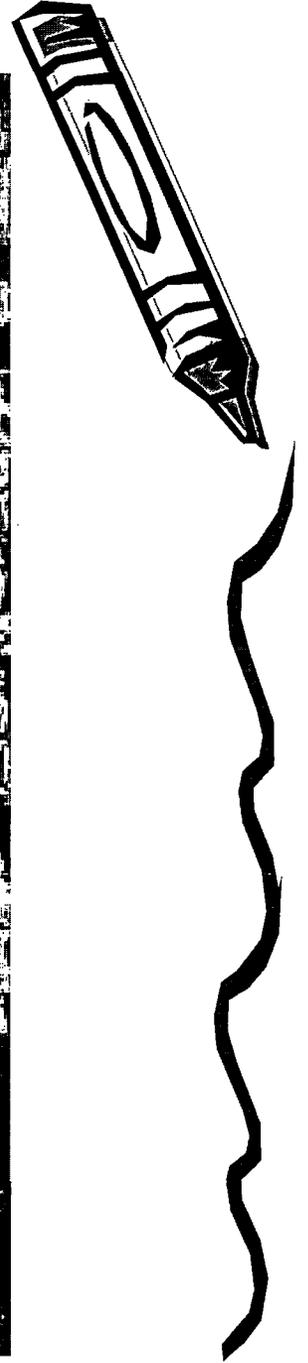
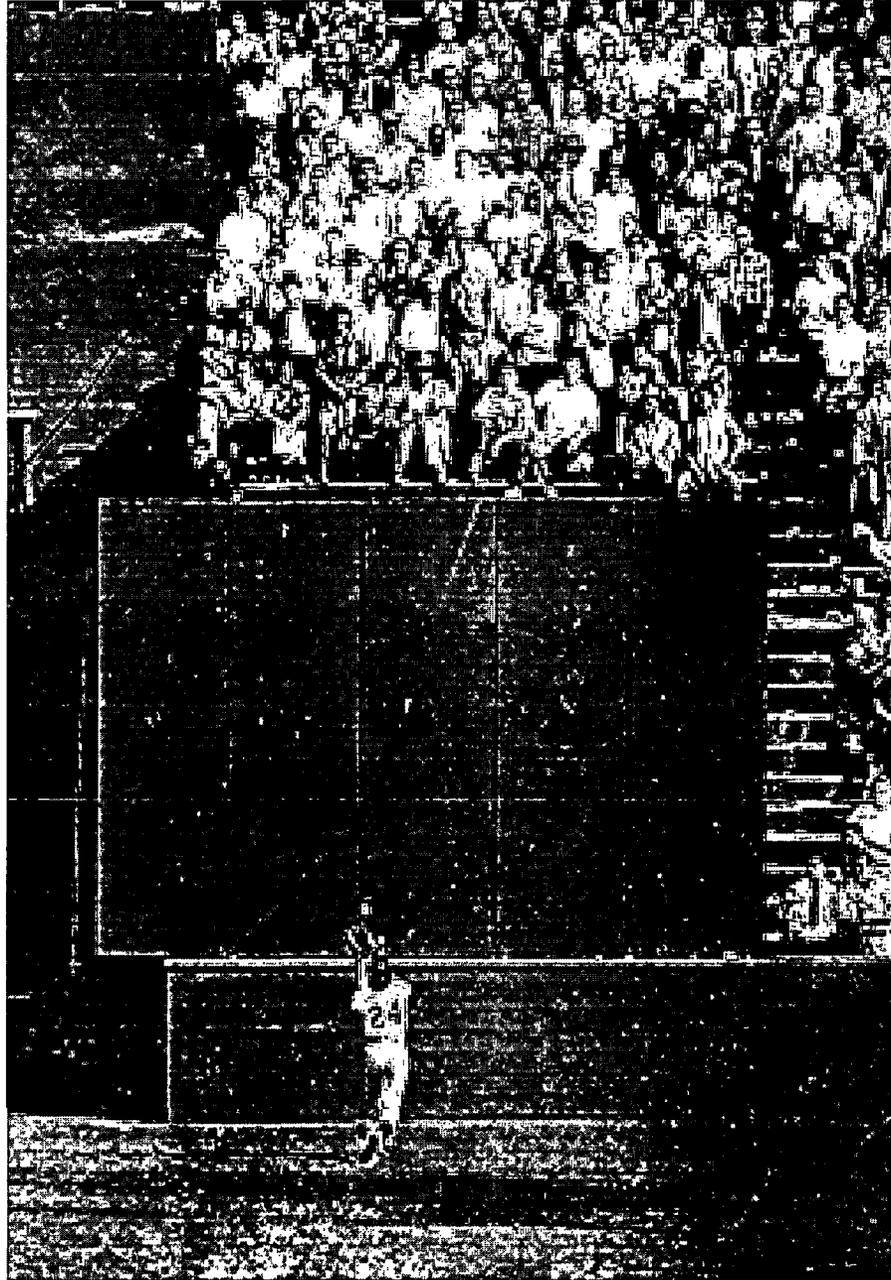
First, some baseball trivia

"Who led the 1954 New York Giants
to the World Series Championship?"

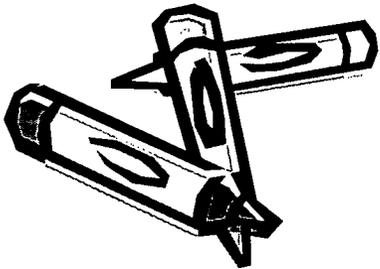
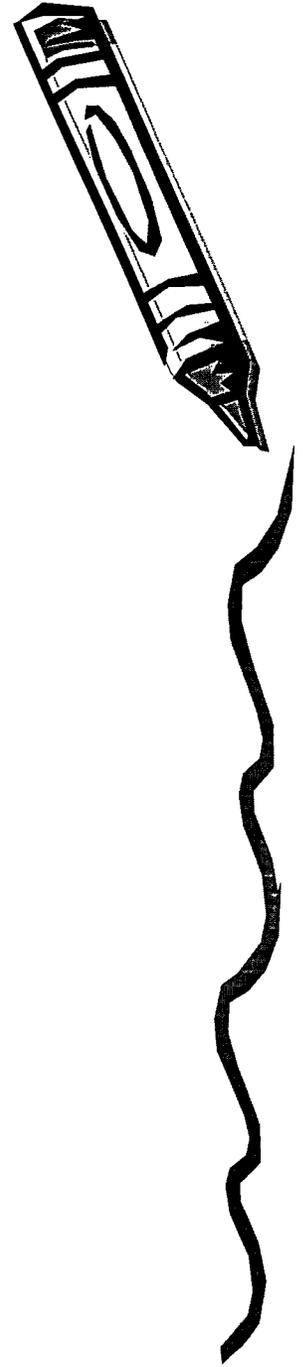


Here is
a hint -

September 29,
1954, Game #1 of
the World Series
between the
Cleveland Indians
and New York
Giants at the Polo
Grounds in NYC

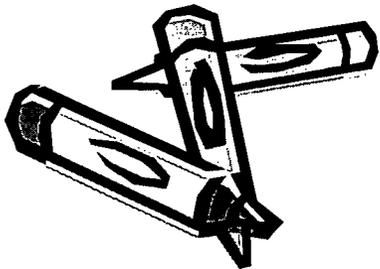


Here is another hint.....





Willie Mays, 1931—, American baseball player, b. Fairfield, Ala. He began his professional career at 17 with the Black Barons of the Negro National League. In 1951 he joined the New York Giants of the National League and led them to a world championship in 1954. Mays was a superb center fielder, an exciting base runner, and an excellent hitter. Four times (1955, 1962, 1964—65) he led the league in home runs, four times in stolen bases, and he was the batting champion in 1954. In 1954 and 1965 Mays was voted most valuable player. He retired in 1973 after playing his final season with the pennant-winning New York Mets, having hit 660 home runs, the fourth highest total on record. Inducted into the Baseball Hall of Fame in 1979.

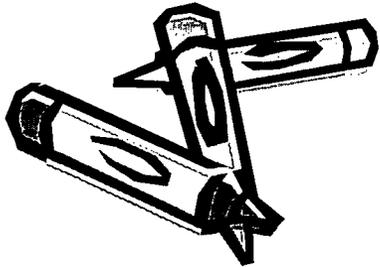
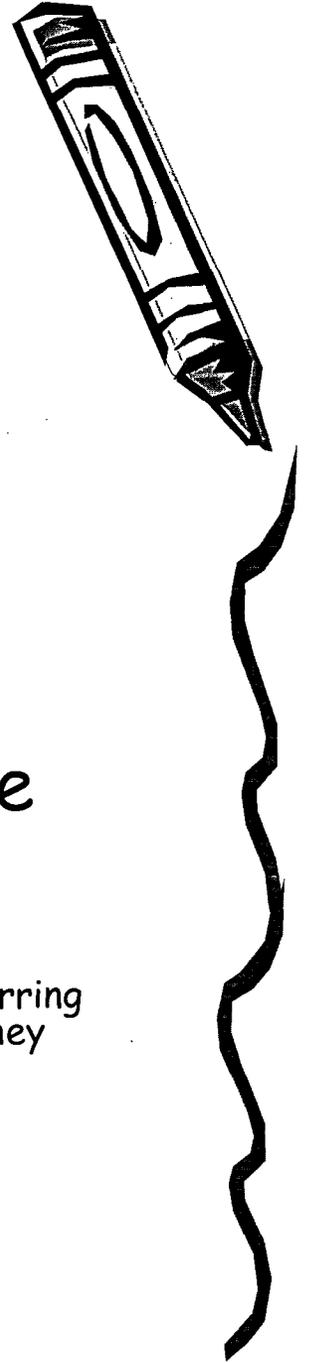


Today's Myth

Category: Significance Determination
Process - Phase 2

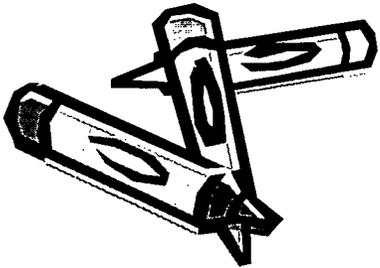
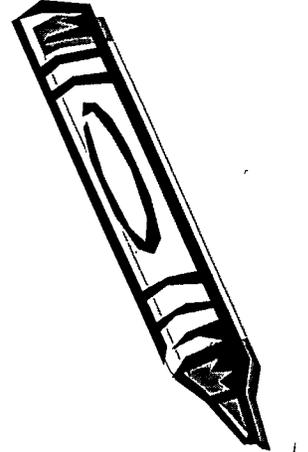
Myth: "[NRC inspectors,] if you see one
of these [Phase 2 Notebooks], don't
touch them."

1960's Willie Mays TV public safety announcement (slightly modified), referring
to dynamite blasting caps found on the ground and what kids should do if they
find one



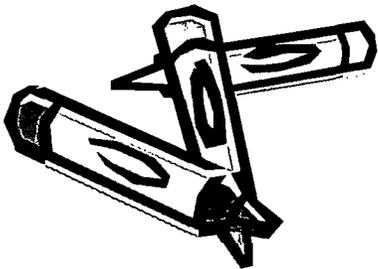
Significance Determination Process (SDP)

- The at power, plant-specific, reactor safety SDP uses a graduated, three-phase process to differentiate inspection findings on the basis of their potential risk significance.
- Final significance determinations may be based on any of the three phases.



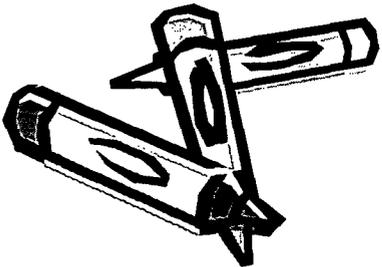
Three Phases of SDP

- Phase 1 - Characterization and initial screening of finding
- Phase 2 - Risk significance estimation using the site specific risk-informed notebook
- Phase 3 - Risk significance estimation using any departure from the guidance of the Phase 1 or 2 processes.



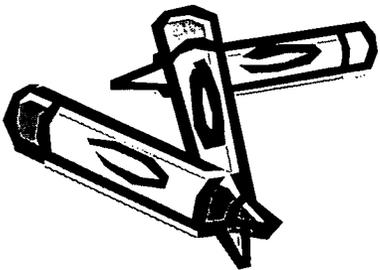
Question: Who performs a
Phase 2 ?

The Phase 2 is intended to be
accomplished by the inspection staff,
with the assistance of an SRA, if
needed. (IMC 0609, Appendix A, page A-2)



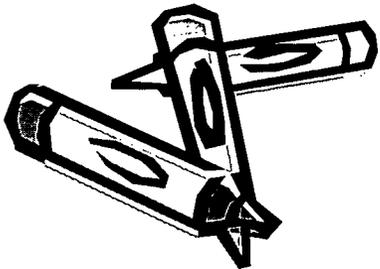
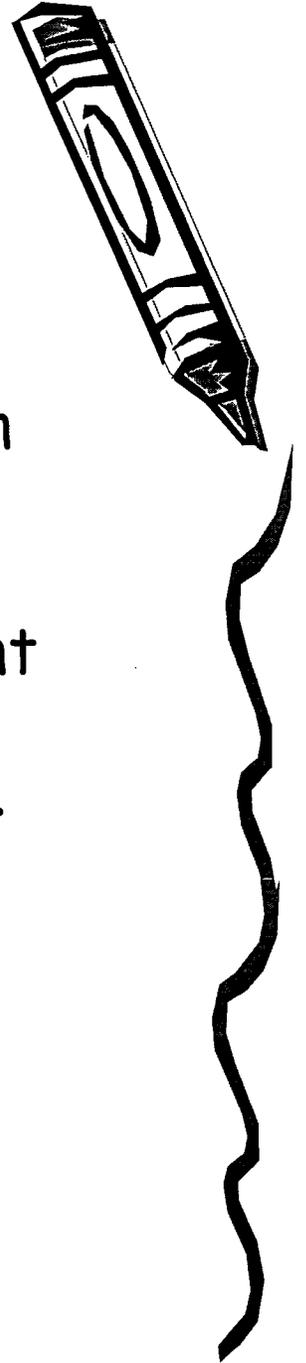
Phase 2 - Six Basic Steps

- 1) Complete the Phase 1
- 2) From Table 2, identify the applicable initiating event (IE) scenarios
- 3) Determine the initiating event likelihood (>30 days, 3-30 days, or <3 days exposure time)
- 4) Estimate remaining mitigation capability using usage rules
- 5) Calculate the estimated risk significance (counting rule worksheet)
- 6) Screen for potential external or LERF contributions ($\geq 1E-7$)



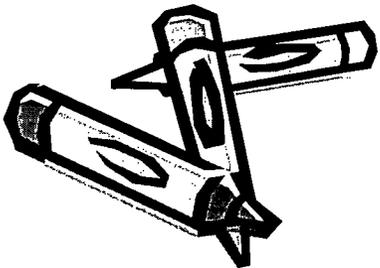
Some Basic Phase 2 Rules to Remember

- 1) Solve only worksheet sequences that contain the component/basic event of interest (one exception)
- 2) Credit operator recovery action if: sufficient time; proper environmental conditions; procedure; training; and equipment available.
- 3) If in doubt, contact an SRA for assistance
- 4) Use the licensee's PRA staff to assist you in accurately characterizing the risk.



Phase 2 Results

- Generally provide a conservative estimate of risk significance
- If potentially greater than Green, by Phase 2, turnover to SRA for further analysis (Phase 3)
- If Green, document per IMC 0612.



Is the Myth True or False?

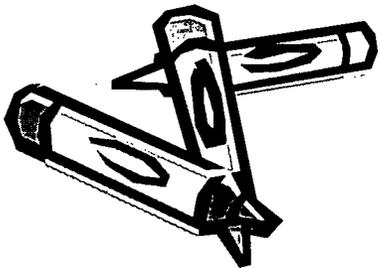
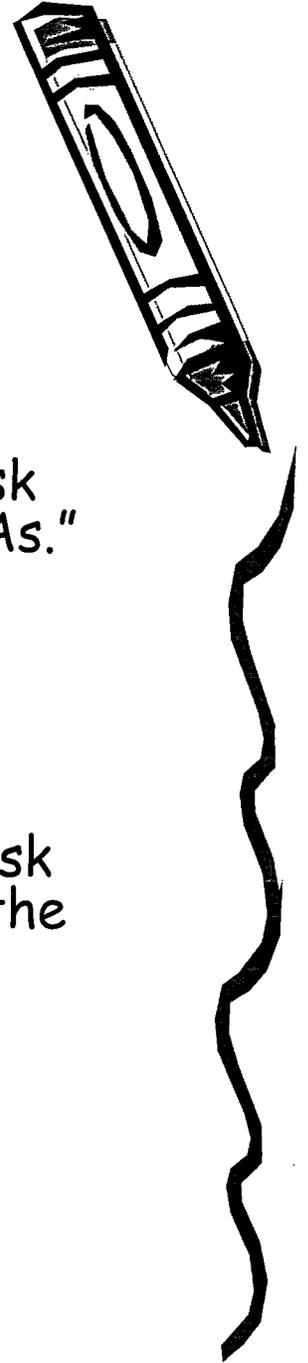
- Myth: "NRC inspectors should not perform Phase 2 risk estimates, that job is only for those highly trained SRAs."

Did you answer True?

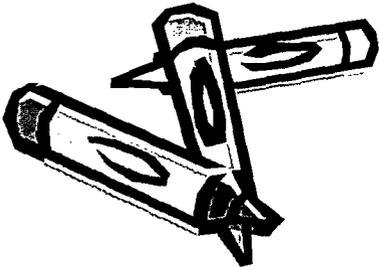
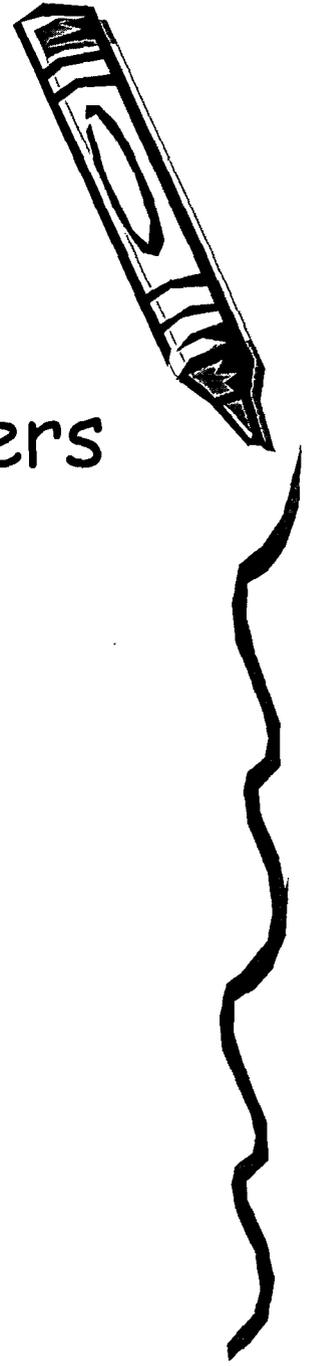
Sorry, but we don't have the corner on this market.

Did you answer False?

Correct. Make a good faith attempt at determining the risk significance of your finding, but don't hesitate to give the SRAs a call for assistance. This is what we do.



Stay tuned for the next exciting
episode (No. 7) of Risk Myth Busters
when we will reveal.....



More secrets about our....

