

February 24th 1998 meeting in Santa Fe. NMED representatives included Barbara Toth and Ralph Ford-Schmid. LANL representatives included Elizabeth Kelly, Randy Ryti, Joe Mose (DOE), and Gil Gonzales. The LANL group posed the following questions to Barbara and Ralph, who provided answers, which (based on my notes) I have attempted to paraphrase (*answers in italics*). **NMED responses, or questions are preceded with *** and are in Bold.**

- Ca/m/98
- 1) Screening issues
- Do we have the right number of receptors on the receptor list (7 too many, not enough)?
Cannot tell yet. Must see food web / feeding guild discussion to support selection of receptors.
 - should we use receptor information from EPA Region 5 or use LANL's proposed receptors?
Use LANL's receptors. EPA's 1993 document Wildlife Exposure Handbook is a good source of supporting information.
 - should we have a target list of analytes to focus the search for toxicity data?
Yes, this is a good idea.
- *** Please provide NMED with the target list as soon as it is compiled.**
- are birds a good choice for screening receptors given the missing toxicity data?
Yes. Must do the best we can. Can extrapolate in some cases for similarly structured chemicals. Identify issues in uncertainty analysis.
- *** The issue of "similarly structured chemicals" will require careful consideration. We will need to work together on this.**
- NOAEL extrapolation -- use any body weight scaling?
No. No body weight scaling.
 - Do we need carnivores? EPA Region 5 used plant, invert., vole, shrew for soil (they had aquatic BAF to estimate bioconcentration for sediment/surface water).
Yes. Must include carnivores.
- *** Why are you comparing this screening process with the EPA Region 5? Are you proposing that we should adopt Region 5 criteria and processes?**
- Do we need rad TRVs (they are >> SALs)? (there is no rad info in the EPA Region 5 data base)
Yes, we need rad TRVs.
 - Should COPECs be identified by the HQ alone or in combination with HI?
In combination, use HI.



***** The HI should be used to evaluate exposure to multiple chemicals/radionuclides with common toxicity endpoints.**

- What depth of samples is appropriate for screening (is there a rule-of-thumb for surface soil)?

No hard and fast rule for depth of samples for screening. Depends on the situation. Must ask is the contamination accessible now and will it be accessible in the future. Although site specific, surface soil generally constitutes top 3 feet, based on burrowing depth and rooting depth.

- Is the Baes method for calculating BAFs (transfer factors) acceptable for screening and preliminary assessments?

Yes. Baes information is based on experimental data and is well documented. Preferred approach.

***** What is the Baes method? Please clarify before applying. If you are referring to the study by Baes et. al (1984) that led to calculations of plant uptake factors/coefficients for inorganics, the answer above seems appropriate.**

- Chemical form -- do we always assume the most toxic form, even if process knowledge can suggest otherwise?

Yes for screening, unless have actual data to support chemical form. Process knowledge is not good enough.

2) Scoping checklist linkage issues

- Can we subset receptors based on the site visit?

No. Only consideration would be about the presence or absence of T&E species.

***** Please clarify sub-setting receptors based on the site visit. The presence or absence of T&E species habitat should be considered only.**

- Can we eliminate pathways?

Yes, but must justify.

- What importance does habitat quality have? Does it tell us anything about the likelihood of effects?

This is a site or PRS specific question. Must be evaluated on a case-by-case basis.

***** Is this the question you are asking? Can there be a likelihood of effect if there is no habitat available for receptors?**

- Is transport a key issue?

Yes.

- How are neighboring PRSs defined?

The issue to be considered is their impact on each other, e.g., commingled releases, up gradient PRSs, etc.

- How does landuse and property control relate to ecorisk screening?

The issue is accessibility and must be considered on a case-by-case basis.

- Does process knowledge define COI?
The issue is one of how valid is the process knowledge. The validity of process knowledge depends on the ability to provide solid documentation. An interview is not good enough. There must be written documentation.

***** Any associated activities or discharges that may have contributed to contamination at the site should be identified and documented in sufficient detail so that the chemical nature of contamination at the site is identified. If this information is not available or is incomplete then sampling must be conducted to reduce the uncertainties associated with incomplete site history.**

3) What are the requirements for Aggregate assessments?

- Are conditions getting better or worse (have we reached the point of maximum concentration/exposure to receptors)?
*Nature and extent *** of contamination issues are important for aggregation.*
- What is an appropriate spatial scale (how do decide on the down gradient boundary)?
Spatial scale depends on physical properties (fate and transport considerations), habitat, and source terms.

***** Physical properties of what? A site's physical properties or a contaminant's physical properties?**

- How do we select receptors?
Receptor selection should be based on food web and feeding guild considerations.
- How do we determine what is a significant effect? (do we still use NOAELs?)
I do not have notes on this question. Anyone else have notes?

***** We do not recall the question being asked. Please clarify what "significance" is of your interest. Yes, we use NOAELs.**