

## **Contaminated Soils Forum**

**December 2-3, 1998**

**Hollywood, Florida**

**Revised Minutes**

Tim Varney, the Contaminated Soils Forum (CSF) co-chair, addressed administrative issues including introductions. Lisa Duchene asked CSF Focus Group participants to review the Contacts List with names, telephone numbers and e-mail addresses. Please notify Lisa (850/488-0190) of any changes or additions. General Note: For copies of papers and handouts referenced in these minutes, please visit our website at: <http://www2.dep.state.fl.us/waste/programs/brwnfld/csf.htm>; or contact Minnie Robinson at (850) 487-2776 to receive a hard copy by mail.

**Approval of Minutes:** The minutes from the previous meeting held in Orlando, Florida on September 30 and October 1 and 2, 1998, were approved. Later one handwritten correction was submitted noting that on page 11, second paragraph, of the minutes, the address shown should refer to "Avenue" rather than "Street".

Also, there was discussion about the format of future minutes for the CSF. Doug Jones, CSF Co-chair recommended that the minutes be streamlined to contain only the highlights of the meeting, including consensus items and outstanding issues. Everyone agreed.

**December 2, 1998**

**Policy Sub-Group**

Ms. McCoy made a general comment that Environmental Equity & Justice (EEJ) needs to be worked into all the focus group reports, and she questioned the various attending agencies' role in EEJ. Richard Deadman responded for DCA; Dennis Howard responded for DACS; and Joe Sekerke responded for DOH. All stated that they are currently working with Dr. Gragg, Director of the Center for EEJ at FAMU, on this issue. Ms. McCoy requested letters on agency letterhead documenting what each agency stated at the meeting today.

### **Cleanup Focus Group**

Geoff Smith presented the combined paper for this group (dated 11/24/98). The paper includes the recommendation for the Unified Rule discussed at the previous CSF meeting.

John Ruddell, Director of the DEP's Division of Waste Management, reported that the DEP has already initiated rulemaking on this rule with the first rule workshop scheduled to be held January 14, 1999, in Tallahassee. He explained that the draft rule incorporates changes recommended by the CSF Methodology Focus Group and the new default cleanup target levels tables generated by the staff from University of Florida.

Outstanding issues for this group include whether a risk range is appropriate and whether

the unified rule should apply to sites outside of the three program areas; i.e., petroleum, drycleaning and brownfields.

One attendee expressed concern about a specific reference in the Cleanup Focus Group Paper to using these same cleanup levels for "disposal"; i.e., the concern being that the unified rule would be applied to areas outside the listed program areas such as in the reuse scenario. Geoff Smith agreed to remove the word "disposal".

The issue of Deterministic Approach versus Probabilistic Approach to risk assessment was raised. Tim Varney asked Linda Lampl, Steve Roberts, Chris Teaf, Bob DeMott, etc. to prepare a presentation for the next CSF meeting to explain the science in laymen's terms. Consensus was reached on this issue; everyone agreed that this presentation would be helpful.

The following **consensus** was reached regarding the conclusions in the paper (see page 22 of the paper):

1<sup>st</sup> bullet: Recommended that the DEP should move forward with rulemaking on the "Unified Rule"; this rule chapter will not establish ambient soil standards and will initially apply only to the three existing program areas (Petroleum, Brownfields, & Drycleaning); there was consensus on this issue.

2<sup>nd</sup> bullet: Recommended that the DEP adopt and incorporate by reference the uniform SCTL's for the three program areas and as default values for Soil Treatment Facilities; there was consensus on this issue.

3<sup>rd</sup> bullet: Recommended that the DEP adopt the uniform SCTL's along with the fundamental RBCA principles to govern cleanup in other program areas; there was consensus that we should have further discussion on this issue.

4<sup>th</sup> bullet: Recommended that the DEP continue dialogue with interested parties to determine whether uniform SCTL's should apply to other program areas including general contamination site cleanups, RCRA closure, and CERCLA cleanups under state oversight; there was consensus that we should have further discussion on this issue.

5<sup>th</sup> bullet: Recommended that the DEP continue to evaluate whether the uniform SCTL's can serve as the basis for establishing risk-based standards applicable to disposal, use or reuse of soils and soil-like materials; consensus: will remove the word "disposal"; otherwise okay.

### **New issue: Disposal or Reuse of Street Sweepings**

Representatives from the public works departments of several local governments and the Florida Department of Transportation expressed concern about the Department's current policy on the disposal of street sweepings. They said that the FDEP requirement that street sweepings be disposed of in a Class I landfill was imposing very high disposal costs on their operations and would result in much less frequent sweeping. They noted that street sweeping is a key Best Management Practice for reducing the impacts of storm water runoff on surface waters. Bill Hinkley, Chief of the FDEP Bureau of Solid and Hazardous Waste, responded that samples from Tampa street sweeping material indicated a potential concern with several parameters that exceeded the SCTLs, but noted that data was very limited. He also noted that it was not FDEP's policy or intent to discourage street sweeping. After consultations with interested individuals and the CSF Co-Chair, Tim Varney, it was agreed to form a separate Street Sweepings Focus Group, with Bill Hinkley acting as the group

contact. Mr. Hinkley will get in touch with the individuals who have expressed a concern about this issue, as well as representatives from the FDEP Division of Water Facilities, and organize the Focus Group after the holidays. In addition, John Schert, Executive Director of the Florida Center for Solid and Hazardous Waste Management, indicated that the Center is currently sponsoring research on contaminants in street sweepings and would be willing to assist in collecting additional data in collaboration with local governments.

## **Science Sub-Group**

### **Peer Review Focus Group**

Dr. Steve Roberts provided a one-page Interim Report summarizing the issues framed by this group. Dr. Roberts explained that the group members were asked to complete a survey with a number of questions relating to peer review. The responses were compiled and redistributed to the group, and in the future they will meet to discuss and develop consensus where possible. The group plans to submit a final report on their findings at a future CSF meeting.

Department staff clarified that the purpose of the Peer Review Focus Group (PRFG) is to recommend a peer review process that can be implemented for future rulemaking at the DEP; it was not intended that the PRFG would peer review the CSF documents/reports.

**Consensus:** to put a peer review process in place for the “unified rule” (i.e., proposed Chapter 62-777, F.A.C.) as well as future updates and modifications to the rule.

### **Presentation by University of Florida staff on the new tables for the Soil Cleanup Target Levels (SCTLs) for Ch. 62-777, F.A.C.:**

The tables distributed at the CSF are DRAFT only. The changes that were made from the previous tables as adopted in the Brownfields Cleanup Criteria Rule (Ch. 62-785, F.A.C.) are based on the recommended changes from the CSF Methodology Focus Group regarding rounding mechanisms and changes in the hierarchy of referenced sources used to obtain input data for the equations.

A handout entitled “The Big Picture” was also distributed which summarized the changes in the tables and listed the percentage of SCTL’s that increased (i.e., became less stringent), decreased or stayed the same. There was also a presentation and explanation of one chemical’s changing SCTL based on the  $C_{sat}$  formula.

### **Break**

Tim Varney explained that he will give a progress report to the Environmental Regulation Commission (ERC) in February. This will be an oral report or a short written summary. Ultimately, the CSF will provide the ERC with a written report memorializing the issues and consensus points combining all the individual focus group reports.

### **Methodology Focus Group**

Bob DeMott explained that the Methodology Focus Group (MFG) would be providing peer review and feedback on the new SCTL's. He stated that the MFG plans to provide an outline of its short-term, mid-term, and long-term goals to the next CSF. They also plan to address some outstanding issues that they were unable to arrive at consensus on during previous meetings. One of the MFG's long-term goals is to look at synergistic issues, but currently little data is available.

Ms. McCoy asked the MFG to consider ethnicity in models for determining SCTL's. DEP staff asked them to consider looking at endocrine disrupters.

### **Policy Sub-Group**

#### **Reuse Focus Group**

Bill Hinkley distributed copies of his group's latest draft paper (dated 12/1/98) and a table entitled "Comparison of Available Data on Average Metal Concentrations in Some Materials From Florida with Department Guidelines and Regulatory Levels."

There was concern that the table title was contrary to the footnotes in the table; i.e., not "average" so Mr. Hinkley agreed to change the title.

Tim Varney asked for a confidence interval and range in the next table. There was also a request for adding the test method used for the sample. DEP staff noted that most were "Total Recoverable".

One DEP staff person noted that the arsenic biosolid level is NOT based on carcinogenic effects, and arsenic is one of the few known human carcinogens.

Mr. Hinkley stated that the focus group would meet or teleconference in the near future to amend the table and the draft of the group's conclusions/recommendations.

One attendee suggested that the group look at the DACS model to compare benefit versus public health threat of reuse.

### **Day Two: December 3, 1998**

#### **Science Sub-Group**

##### **Communications Focus Group**

This focus group presented its revised paper entitled "Approaches to Communication in Risk-Based Decision-Making: Putting Theory Into Practice" and discussed several communication models outlined in the paper. There was discussion about how to get communities interested and involved in public meetings regarding risk issues.

Ms. Margaret Larkins expressed concerns about community leaders and group members

having difficulty traveling to the CSF meetings due to budget constraints. Tim Varney asked if Ms. McCoy's neighborhood association can accept donations from the private sector to be earmarked for allowing community members to travel to the meetings. Ms. McCoy stated that the neighborhood association is incorporated and donated funds could be earmarked for that purpose.

A representative from FDOT stated that they have a new initiative called Community Awareness Programs (CAPs) which are required for new projects. He suggested that FDOT's communications office may have information on this outreach effort.

Joe Sekerke, representing DOH, stated that DOH has broadcast capabilities to each county public health unit. He will check to see if future CSF meetings can be broadcast this way to reduce travel costs for community members. Tim Varney commented that he is teaching a class at USF next semester via satellite, and they may be able to use the same approach to broadcast these meetings.

DEP staff cautioned that video teleconferencing should be a distant second choice because you lose the human interaction aspect of communication; people's reactions, body language, etc., are important components of communication.

### **Break**

After the break, the CSF outlined two outstanding issues for this focus group to address:  
(1) Investigate the possibility of agency training for communicating risk; and  
(2) Search for funding options available for communication and risk outreach.

Tim Varney offered to write a letter to the legislature to request funding for this effort. He asked the Communications Focus Group to draft correspondence describing what the money will be used for.

## **Application Sub-Group**

### **Institutional Controls Focus Group**

Geoff Smith summarized the latest draft of this group's paper and commented that the group is still researching other state's laws and the possibility of a State Registry. Marc Bruner explained his Stewardship Concept which uses a non-profit corporate entity to take responsibility for the contaminated sites subject to institutional and/or engineering controls. This entity would be responsible for maintaining the solution (the final remedy) and it would require financial assurance mechanisms similar to the permit scenario.

### **Guest Speaker Presentation by Roger Schwenke, Esq.**

Mr. Schwenke is an attorney with Carlton, Fields in Tampa, Florida, and specializes in Environmental Law and Real Property Law. He distributed copies of his recent paper

(presented at the Fla. Env'tl. Expo '98) which addresses how feudal real estate doctrines and "Whose job is this?" problems can impact the use of institutional controls. Mr. Schwenke gave a short presentation on this topic and answered questions from the group. He commented on the DEP's current model restrictive covenant and also summarized what some other states are doing in this area. He stated that legislation to fix Florida's law would be helpful, but we must be careful to ensure that it is drafted in the context of Florida's program; i.e., we shouldn't just copy another state's law.

Richard Deadman, representing the DCA, commented that the 1987 Growth Management Act requires an existing and a future land use map. To change the future land use map, the local government must get approval from the DCA. Mr. Deadman asked Mr. Schwenke if we can create a system where local governments are notified of Deed Restrictions and have the future land use map modified, so if a future land owner wants to change the use then he would need sign off from both the DCA and the DEP.

Mr. Schwenke stated that this can complement DEP's role in the process, but he still likes the idea of a Central Registry (to put people on notice about which sites have remaining contamination.)

The outstanding issue is not so much the legal durability of the control; it is the practical question of how it will be monitored to ensure it remains in place.

### **Engineering Controls Focus Group**

Roger Register presented his group's draft of their latest paper and highlighted the new issues.

DEP staff distributed copies of a spreadsheet entitled "State of Florida Sites with Institutional Controls", but cautioned that it was still an early draft. DEP needs to complete QA/QC checks on the data.

### **Administrative Wrap-Up**

There was discussion about when to schedule the next CSF meeting. Due to concerns about conflicts with legislative session, it was agreed to hold the next meeting in May 1999 (the week of the 17th). Meanwhile, the individual focus groups can continue to meet and finalize their papers.

The location for the next meeting will be in Tampa at the University of South Florida. Tim Varney will check with the meeting facilities staff at USF to find meeting room availability. Tim stated it would be a 3-day meeting with the Science Sub-Group the first day presenting the discussion on Probabilistic vs. Deterministic Risk Assessment. Tim stated he would prepare a more detailed agenda with time-specific presentations.

Tim Varney also announced that all comments on all focus group papers should be submitted to group leaders by the end of January.

## Memorandum

# Florida Department of Environmental Protection

**TO:** Contaminated Soils Forum Participants  
Interested Parties

**FROM:** Douglas A. Jones, Chief  
Bureau of Waste Cleanup

**DATE:** October 23, 1998

**SUBJECT:** Minutes of September 30, October 1 and October 2, Contaminated Soils  
Forum Meetings

The minutes of the Contaminated Soils Forum (CSF) meetings held during September 30, October 1, and October 2 are enclosed for your review. One item that was agreed to in previous meetings was that the minutes of the previous meetings will be reviewed and approved by participants as an initial action at subsequent meetings.

Also enclosed is an **updated** "Contacts List" of those who volunteered for each of the focus groups. The list includes telephone numbers and e-mail addresses to facilitate communication among members. If you wish to participate in a focus group, please contact the group leader where one is indicated or, if not, any member of the group for further information.

The next series of Contaminated Soils Forum meetings will be held **December 2** and **December 3** at the offices of the South Florida Regional Planning Council located at 3440 Hollywood Boulevard, Suite 140, Hollywood, FL 33021. Their phone number is (954) 985-4416. Directions to the meeting are enclosed.

Policy and Science Groups	Wednesday, December 2	9:00 a.m. until not later than 5:00 p.m.
Application Group	Thursday, December 3	9:00 a.m. until not later than 5:00 p.m.

For updates of the focus group papers or information related to past CSF meetings please visit our website at: "[www.dep.state.fl.us/waste/programs.htm](http://www.dep.state.fl.us/waste/programs.htm)".

Although an agenda has not yet been developed for the next series of meetings, the discussion will center on presentations by the focus groups that have been established. If you have general questions about the Contaminated Soils Forum, please contact Roger Register, Lisa Duchene or Doug Jones at 850/488-0190.

Enclosures (2)

## **CONTAMINATED SOILS FORUM**

**Orlando, Florida**  
**Sept. 30 and Oct. 1-2, 1998**

### **Minutes**

**Note: Highlighted portions of the minutes indicate presenters' names and titles of focus group papers, consensus items (i.e., decisions made), or tasks to be completed.**

### **SEPTEMBER 30, 1998: POLICY SUB-GROUP**

Tim Varney, the Contaminated Soils Forum (CSF) co-chair, addressed administrative issues including introductions. Tim wrote letters to the agency heads of the Florida Department of Community Affairs (DCA), the Florida Department of Agriculture and Consumer Services (DACS), and the Florida Department of Health (DOH). Tim received letters from all three naming the following as their designees:

DCA: Richard Deadman

DACS: Steve Rutz (John Corry attended for Steve)

DOH: Dr. Inman (Dr. Joe Sekerke attended for Dr. Inman)

### **Approval of Minutes**

Leola McCoy, representing Bass Dillard Neighborhood Issues & Prevention, Inc., requested that in future minutes we reference her name rather than referring to "Community Activist". Minutes approved.

### **Administrative Issues**

Tim Varney raised the issue of changing the name of the CSF since it encompasses more than just contaminated soils. He suggested "Contaminated Media Forum." Others expressed concerns that Tim's suggestion would be confusing because it sounds like television and newspaper "media". Another suggestion was "Contaminated Materials Forum"; others felt we should not change the name. After some debate without any consensus, the group agreed to move on to other issues and address this on Friday.

Leola McCoy and Audrey Peterman requested hard copies of all CSF focus group papers since they don't have e-mail. Department staff agreed to mail or fax copies to them.

There was a suggestion to have name tags for the next meeting. Department staff will provide these.

Tim Varney discussed the need to establish short term and long term goals for the CSF. He wants the group to list and prioritize these goals as part of this meeting and future meetings. Tim recommended a book entitled "Communicating Risk in a Changing World" by the Ramazzini Institute/OEM Press (with multiple contributing authors).

Lisa Duchene asked CSF Focus Group participants to review the Contacts List with names, telephone numbers and e-mail addresses. Please notify Lisa (850/488-0190) of any changes or additions.

### **Cleanup Focus Group**



**Geoff Smith presented his paper entitled: “The Need For Uniform Policy” and answered questions. [You may download a copy of this paper from the Internet at: <http://www2.dep.state.fl.us/waste/programs/brwnfld>; or contact Minnie Robinson at (850) 487-2776 to receive a hard copy by mail.]**

Concerns were expressed regarding the need to distinguish in this paper the various pieces of legislation that have adopted Risk-Based Corrective Action (RBCA) with respect to the issue of requiring Institutional Controls for contaminated soils below two feet (this requirement is in the brownfields and drycleaning legislation, but not in the petroleum legislation).

The DEP staff explained that they addressed this in the cleanup rule for the petroleum program (i.e., Ch. 62-770, F.A.C.) so the programs are being implemented consistently.

The Conclusions/Recommendations in Geoff’s paper include:

- DEP should move forward with promulgation of the risk based SCTLs currently incorporated in Chapters 62-770 and 62-785 into a separate rule chapter that will be uniform and can be periodically updated to keep pace with emerging science. This separate rule chapter would not establish ambient soil standards and would apply only if adopted and incorporated by reference in another rule chapter of the Department.
- DEP should adopt and incorporate by reference the uniform SCTLs for the three designated program areas: Petroleum Cleanup, Brownfields, and Dry Cleaning Solvent Cleanup.
- DEP should adopt and incorporate the uniform SCTLs in other program areas as determined appropriate. In the short term, DEP should consider adopting the uniform SCTLs for the Soil Treatment Facility rule, general Contamination Site Cleanups, RCRA closure, and CERCLA cleanups under state oversight.
- In the longer term, DEP should continue to evaluate whether the uniform SCTLs can serve as the basis for establishing risk based standards applicable to disposal, use or re-use of soils and soil like materials.

Ms. McCoy expressed concerns regarding EPA applying a  $10^{-4}$  cancer risk level at the Wingate Superfund Site contrary to the state’s  $10^{-6}$  level.

Dr. Joe Sekerke offered clarification on what  $10^{-6}$  means. He explained that it doesn’t mean one in a million will get cancer; it means they are 95% certain that the risk is no greater than one in a million (often less).

John Ruddell, Director of the DEP’s Division of Waste Management, stated that the DEP’s position is that its numbers for Brownfields, Petroleum, and Drycleaning are ARAR’s (i.e., Applicable or Relevant and Appropriate Requirements) for the State of Florida, and that we are continuing this debate with EPA.

Several participants noted that the  $10^{-6}$  cancer risk level was developed through a consensus work group (initially adopted in the 1996 petroleum legislation) and stated that we should maintain that level of risk as a matter of public policy because it has been adopted by the Florida Legislature.

It was noted that there exists disagreement within the Cleanup Focus Group regarding DEP’s authority to apply its Soil Cleanup Target Levels (SCTL’s) at non-program sites. There was

further discussion about the Tomoka case (see minutes from August '98 CSF for previous discussion) and the possibility that it may be appealed to the Florida Supreme Court or addressed through the legislative process (i.e., a bill is being drafted to overrule the case).

**Note: The following discussion regarding the conclusion's in Geoff Smith's paper occurred at the end of the first day's meeting; however, it is included here in the minutes to assist the reader in understanding the discussion in context.**

**Discussion of conclusions in Geoff's paper (see bullets above):**

**Bullets 1 and 2. There was consensus to go forward with the Uniform Rule for SCTL's (i.e., Tables with the default numbers) and incorporate this by reference in Chapters 62-770, 62-785, and 62-782, F.A.C. (the Petroleum, Brownfields, and Drycleaning rules).**

**Bullet 3. There was debate on this issue with the conclusion that it is okay for the DEP to adopt and incorporate by reference the Uniform Rule SCTL's in the Soil Treatment Facilities Rule, but there was no consensus on the other program areas.**

DEP staff urged the CSF to continue to consider/debate (in future meetings) the issue of whether the Uniform Rule SCTL's should apply to other program areas.

One DEP staff person inquired about how the counties and citizens feel about this issue. Ms. McCoy stated that the citizens want a uniform standard across the board ( $1 \times 10^{-6}$ ). One county representative agreed that they support application of uniform SCTL's at all types of sites. One attorney who represents counties that are Potentially Responsible Parties (PRP's) asserted that they have a different perspective on this issue since they may be responsible for the cost of cleanup.

**Bullet 4. One participant expressed concerns about the phrase "longer term" because they have already been dealing with the reuse issue for RSM for 3 years. He's concerned that the RSM issue is on hold until consensus is achieved through the CSF process. DEP staff assured the group that Bullet #4 doesn't preclude them from continuing to work on the RSM policy. There was consensus to remove the word "disposal" from this bullet, but otherwise leave as is.**

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**Mike Petrovich presented his paper entitled "Issues Paper -- 'Universal' Applicability of Risk-Based Corrective Action at Florida Waste Cleanup Sites" [You may download a copy of this paper from the Internet at: <http://www2.dep.state.fl.us/waste/programs/brwnfld>; or contact Minnie Robinson at (850) 487-2776 to receive a hard copy by mail.]**

One concern expressed was that the paper fails to acknowledge the state-specific policy decisions that were made through the Florida RBCA Workgroup beginning in August 1995 and that these state decisions are a key element of RBCA. Florida RBCA uses a three-tiered approach to cleanup similar to ASTM RBCA. The Florida RBCA Workgroup debated this and arrived at consensus. The paper overlooks the existence of Tier 2; the Legislature provides authority and this tier is built into the Florida RBCA process. Tier 2 provides cost-effective practical solutions (short of full-blown Risk Assessment). However, it is often not selected because of other requirements, such as Engineering and/or Institutional Controls. The ASTM process allows each state to set risk management policy, so Florida's RBCA need not be exactly like ASTM RBCA (it just provides the framework). Also, the statute requires that human health and the environment be protected; therefore, Ecological Risk is considered. The stakeholders in the RBCA workgroup represented 70 - 80% of all contaminated sites.

The DEP staff added that ASTM lays out the framework, but urges states to make policy decisions based on state-specific conditions. The RBCA workgroup made these decisions two

years ago, and they were adopted by the legislature.

Another participant expressed concern that the current RBCA in Florida can never be implemented successfully because it's contrary to the notion of RBCA; i.e., site-specific risk evaluations. He doesn't think statewide applicability of policy decisions like  $1 \times 10^{-6}$  is appropriate.

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**Bob Wells was not present at this meeting, but copies of his paper entitled "Discussion Points -- Contaminated Soils Policy, Standards and Target Levels" were distributed for review and comment. [You may download a copy of this paper from the Internet at: <http://www2.dep.state.fl.us/waste/programs/brwnfld>; or contact Minnie Robinson at (850) 487-2776 to receive a hard copy by mail.]**

**After a short break, Tim Varney requested that the 3 papers for the Cleanup Focus Group be consolidated into one paper for the next meeting.**

Ms. McCoy expressed concern that the 3 Cleanup Focus Group papers did not include the Environmental Equity & Justice (EEJ) issue. The policy needs to be driven equally and equitably by human science with particular consideration for the groups that have been disproportionately impacted.

**Tim Varney requested that all future paper submittals include a Cover Sheet listing the members of the group contributing along with their phone numbers.**

Wilbur Mayorga requested the opportunity to see and comment on the next draft of the Cleanup Focus Group paper before it is finalized.

**Tim Varney agreed; the papers will be circulated. (Note: DEP staff will put the revised drafts on the webpage prior to the next CSF meeting; papers may be downloaded from the Internet at: <http://www2.dep.state.fl.us/waste/programs/brwnfld>; or contact Minnie Robinson at (850) 487-2776 to receive a hard copy by mail.)**

### Reuse Focus Group

**Marc Bruner presented the Reuse Focus Group Paper entitled: "Contaminated Soils Forum Policy Group/Reuse Subcommittee Issues Paper" (dated 9/21/98).**

One issue discussed by this group was Biosolids. The DEP's Division of Water Facilities' (DWF) current rule governing Biosolids has numbers that are different from the SCTL's and the  $1 \times 10^{-6}$  cancer risk level. One participant commented that the ERC requested further scientific evaluation of this issue when the Biosolids Rule was adopted; perhaps this group should look at this issue and report back to the ERC.

Another issue raised is whether different levels of risk should be considered for reuse based on a cost-benefit analysis.

Another participant expressed concern related to Recovered Screen Material (RSM) and wood mulch; if substances are reused and spread around the state with high arsenic levels, this presents a problem.

DEP staff mentioned the Arsenic Task Force composed of stakeholders from DEP, DERM, DOH, and U of F. They also explained that organic arsenic becomes inorganic arsenic over time. Currently, we know inorganic arsenic is a human carcinogen, and we have animal data to show

that organic arsenic is also a carcinogen. The task force is looking at all these issues using scientific research including a bioavailability study (a 2-year study) that is being conducted currently. The task force is very active and members are still debating such issues as background levels of arsenic. (Members of the task force are also members of the CSF Science Sub-Group.)

Problems associated with CCA treated lumber (Chromium Copper Arsenic); i.e., the green-colored pressure treated wood, were also discussed. John Schert, Director of the Florida Center for Solid & Hazardous Waste Management, explained that his Center is sponsoring a study on CCA treated wood at U of M. He noted that some view this problem as the "Sleeping Giant" because there is a huge reservoir of CCA wood currently in use that will come out of use in the near future (usually lasts 20 years), so it's becoming a bigger problem. Some countries have even banned CCA treated wood.

One participant asked whether we consider the size of the reuse product; e.g., large chunks that can't be ingested or inhaled. DEP staff stated that size is considered, but that the assumption is it is ground up into tiny particles that could be inhaled or ingested (i.e., worst case scenario).

Another participant noted that we need to provide a reachable goal as an incentive.

Others responded with concern noting that we are not talking about 1 or 2 in a million; we're talking about orders of magnitude. Land use may change over time and you must consider potential future exposure, not just current exposure.

**Tim Varney requested a re-draft of the Reuse paper with everything in one table (comparison side-by-side).**

#### **Environmental Equity & Justice (EEJ) Focus Group**

**Ms. Leola McCoy gave a presentation and provided copies of a handout of the Executive Summary of Recommendations from the Symposium on Health Research and Needs to Ensure Environmental Justice. [You may download a copy of this handout from the Internet at: <http://www2.dep.state.fl.us/waste/programs/brwnfld>; or contact Minnie Robinson at (850) 487-2776 to receive a hard copy by mail.]**

Ms. McCoy expressed concerns that health studies have not been done on the people impacted (people of color). She asserts that the current numbers are based on the 154 lb. white male. She believes we need to focus on the human issue; "people" need to be in the equation. The equity piece must be fused into all other areas of the CSF, and the DEP needs to take the lead along with DCA, DACS, & DOH to take action on these EEJ issues.

**Ms. McCoy agreed to incorporate her materials into Dr. Gragg's for the next meeting.**

Ms. Audrey Peterman added that we need to consider the community-based experience that the people have to offer; e.g., their knowledge of health problems in the community.

#### **OCTOBER 1, 1998: SCIENCE SUB-GROUP**

Tim Varney, co-chair of the CSF, provided an overview of Day One and introductions.

#### **Communications Focus Group**

**Linda Lampl presented this group's paper entitled: "Communication, Risk, and Public Policy: A Working Document" [You may download a copy of this paper from the Internet**

at: <http://www2.dep.state.fl.us/waste/programs/brwnfld>; or contact Minnie Robinson at (850) 487-2776 to receive a hard copy by mail.]

Ms. McCoy expressed concern that the report is missing an important component: listening. She stated that this has to be incorporated into the process and it needs to be a “partnership”. The scientists and consultants are always trying to sell the community on their ideas, but the community doesn’t trust them. They need to present the facts in laymen’s terms and listen to community input; i.e., “the community science”.

**Tim Varney asked Linda to provide a recommendation as to what the CSF should do regarding communication, and he also asked Linda as an expert in risk communication to critique the CSF thus far.**

One participant asked the Communication Focus Group to present a workable plan for how DEP should approach the communication issue with respect to particular sites. Also, he urged them to ensure both sides of issues are presented so it’s not one-sided; e.g., Michael Hartman’s report referring to eating 40 tablespoons of peanut butter being as risky as living next to a brownfield site. We need to allow for counter point.

One participant questioned how to get more community members involved in this process. Another wondered how you can write the requirement for effective communication into a DEP rule. How do you put this into the regulatory framework?

Ms. McCoy stated that the problem is systemic and therefore needs to be addressed holistically. Region IV EPA is looking at this issue, so we don’t have to re-invent the wheel. EPA will probably require us to follow their guidance.

One suggestion was to expand the brownfields advisory committee requirement to other types of sites and to empower the community to make decisions and be “partners” in the process. Another suggestion was instead of approaching the community and saying “This is what we’re going to do....” we need to bring them in early on and work with them to arrive at conclusions.

Dr. Joe Sekerke (DOH) asked how can we communicate these technical issue to the people. Ms. McCoy responded saying that DOH has sent out pamphlets in the past which no one reads. She believes the agencies need to come into the communities and meet with the residents in small groups. She thinks we need to assess current communication efforts and then figure out how to improve on these; we need to identify the leaders in the community that are viewed as credible and trustworthy and get them involved.

One participant noted that networks may already exist, for example, with local brownfields coordinators for local government. (Note: DEP staff is following up on this and asking each District Brownfields Coordinator to provide any network contacts.)

**DEP staff specifically wants to know how to communicate *risk*. They asked the Communication Focus Group to focus on this issue.**

**Linda Lampl noted that there is a list of Discussion Questions on the back of the handout, and she asked that we send her any comments on these.**

One participant recommended that the Communication issue be moved to the Policy Sub-Group or the Application Sub-Group. But another participant urged the Communication Focus Group to continue to work with the Science Sub-Group to help put the findings and recommendations of these Focus Groups into laymen’s terms.

**Audrey Peterman requested a correction to the Communication Focus Group paper on page 5 under the heading of “Capacity Building” (last sentence): she is not “translating “**

**Mike Hartman's lecture/message; she is doing this translation for the larger CSF meetings.**

### **Methodology Focus Group**

**Bob DeMott presented this group's paper entitled: "Report to Florida Contaminated Soils Forum" (Submitted by: Methodology Focus Group dated 9/29/98). [You may download a copy of this paper from the Internet at:**

**<http://www2.dep.state.fl.us/waste/programs/brwnfld>; or contact Minnie Robinson at (850) 487-2776 to receive a hard copy by mail.]**

Ms. McCoy expressed concern that we haven't adequately addressed synergistic effects. Also, she asserted that we need to consider not only future exposure, but also current and past exposure.

One participant recommended that we only update the new Uniform Rule every 2-3 years rather than annually (due to legal process requirements). Meanwhile, anyone who wants to use a different number can use the Alternative Cleanup Target Level (ACTL) process provided for in each rule or request a variance or waiver under Chapter 120, Florida Statutes. We may want to include evaluation of a probabilistic versus deterministic approach.

One participant pointed out that the focus is on the SCTL Tables which are defaults. What about site-specific process review? Should the Methodology Focus Group look at this issue?

One question raised was: Based on the recommendations in this paper, if adopted, would this result in changes to the current SCTL Tables?

Bob DeMott explained that it would result in changes based on the "no rounding" (of numbers) and the new priority for reference documents. He estimated that probably dozens of the chemical numbers will change.

Another participant asked whether these same recommendations can/should be applied to groundwater CTL's. One of the attorneys present pointed out that this would involve both legal and scientific issues.

One participant asked how annual revision of SCTL's would affect sites with work in progress. A DEP staff person explained that in the petroleum program, if a Site Rehabilitation Completion Order (SRCO) has been issued then no additional work will be requested. But sites with work in progress may be subject to new SCTL's.

Doug Jones, CSF co-chair, urged the CSF to address the issue of what to do when evolving science produces substantially different numbers in the SCTL's; i.e., should the sites in progress with existing cleanup agreements be subject to the new numbers?

Dr. Steve Roberts, who is in charge of the effort to revise the SCTL tables, explained that the changes will be peer reviewed. In response to some of the concerns raised by Ms. McCoy, Dr. Roberts explained that the 154 lb. person used to derive the SCTL's is based on average body weight for all people (men, women, children, all races, etc.) He explained that synergism types of issues and special populations are factored in; e.g., the populations used to calculate the SCTL's include smokers and people with poor nutrition because we know these special populations are more at risk for cancer, so that information is factored into the equation. The models used are not based on protecting any one ethnic group or gender. They consider all people.

DEP staff noted that under the brownfield process, there is a provision for looking at site-specific actual circumstances of exposure. (In other words, if the 154 lb. person is not the average for a particular site, then the numbers may be adjusted based on knowledge of site-specific

conditions.)

Dr. Joe Sekerke (DOH) pointed out that actual human data from occupational exposures are generally from people of color because they more often are employed in jobs that result in chemical exposure. This human data is one of the sets of data used to derive SCTL's.

**Note: The following discussion regarding the future activities of the Methodology Focus Group (MFG) occurred at the end of the second day's meeting; however, it is included here in the minutes to assist the reader in understanding the discussion in context.**

There was discussion of which should occur first: should methodology issues be resolved before going forward with the Unified Rule, or vice versa; and there were questions regarding peer review of the SCTL's.

DEP staff noted that the current SCTL's were peer reviewed.

**The U of F group (Dr. Steve Roberts and staff) agreed to generate the Draft Revised Table by the next meeting (1st week in December).**

**The group agreed that the following recommendations from the MFG paper can be accomplished quickly: Recommendations 4,5,6,7 and 8.**

**Another task for the MFG to work on is development of principles/guidelines regarding deviations from the default tables (i.e., site-specific risk assessment).**

**Steve Roberts raised additional issues not resolved by the MFG regarding rounding of numbers. He asked: If the MFG gets consensus on these issues can they go forward and develop the revised table without coming back to the CSF first? Group consensus: Yes.**

DEP staff commented that the Draft "Background" document has been written (i.e., background concentrations of constituents in Florida soils), and also Risk Assessment guidance has been written. **DEP staff will provide the draft to the MFG to use as a starting point. The Cleanup Focus Group will also look at this issue (i.e., Risk Assessment).**

#### **Peer Review Focus Group**

Peer Review Focus Group: No presentation or paper at this meeting; will have at next meeting.

#### **Ecological Risk Focus Group**

**Ed Zillioux presented this group's paper entitled: "Report of the Ecological Risk Focus Group to the Contaminated Soils Forum" (dated 9/28/98). [You may download a copy of this paper from the Internet at: <http://www2.dep.state.fl.us/waste/programs/brwnfld>; or contact Minnie Robinson at (850) 487-2776 to receive a hard copy by mail.]**

One participant asked what is the state of science with Ecological Risk? How quickly is it changing? Ed Zillioux explained that 90% of the data for organisms that live in soil is based on earthworms. New data is developing over time; e.g., wildlife criteria are developing (Birds in particular, especially Mallard Ducks).

DEP staff noted that the info available is based on Dutch data, but EPA is reluctant to use this because it hasn't been translated. Also, some Canadian data is available. But DEP is not aware of any state guidelines. Ed noted that he had information from Kentucky and Texas.

One participant asked how the Ecological numbers compare to the SCTL's. The response was

that it depends on the constituent.

DEP staff asserted that the emphasis in the beginning should be on terrestrial critters (i.e., birds, worms, etc.), since this is the *soils* forum. Later on the group could focus on surface water Ecological Risk. Ed Zillioux explained that the EcoRisk Focus Group took a different view because the problem at these sites is runoff to surface waters. Also, ASTM is working on Ecological Risk guidelines, but we'll need to develop Florida-specific guidelines.

Ms. McCoy stated that this is critically important because it is part of the holistic approach. We need to look at the entire ecosystem to understand the whole problem.

Mike Petrovich questioned the statutory authority to consider ecological risk in establishing the SCTL's, and he asked that we add this issue to the Cleanup Focus Group issues.

DEP staff suggested that the EcoRisk Focus Group consider tapping into the resources of the new Brownfields Center or the Center for Solid & Hazardous Waste to help with this issue.

**Issue: Whether CSF Ecological Risk Focus Group should move forward with developing guidelines? Consensus: On hold till next meeting. (Can begin gathering other sources of data now.)**

#### **Environmental Equity & Justice (EEJ) Focus Group**

Dr. Richard Gragg gave this presentation to augment what Ms. Leola McCoy presented on day one of the CSF, since he was unable to attend the first day. Dr. Gragg distributed copies of "Chapter 4: Recommendations on Achieving Environmental Justice" from the Environmental Equity and Justice Commission's (EEJC) final report.

**[You may download a copy of these handout materials from the Internet at:**

**<http://www2.dep.state.fl.us/waste/programs/brwnfld>; or contact Minnie Robinson at (850) 487-2776 to receive a hard copy by mail.]**

Four Subcommittees of the EEJC developed a list of recommendations that included:

1. Legislative Recommendations; and
2. Policy Recommendations

(See handout for the details including a breakdown of policy recommendations by agency; i.e., DEP, DOH, and DCA.)

**Tim Varney asked each agency named in the EEJC report (DEP, DCA, & DOH) to give a progress report at the next CSF on how they are implementing the EEJC's policy recommendations.**

**Ms. McCoy requested that an interagency workgroup be established to address EEJ. Dr. Gragg offered to have his Center help to facilitate this workgroup among the agencies.**

#### **OCTOBER 2, 1998: APPLICATION SUB-GROUP**

**Tim Varney announced that the deadline for submittal of all revised Focus Group Papers is Monday, November 2, 1998. Please include a cover sheet identifying the group leader and the members of the focus group.**

#### **Engineering Controls Focus Group**

**Roger Register presented this group's paper and acknowledged David Gerard's**



**contribution to the paper (he did 90% of the work). [You may download a copy of this paper from the Internet at: <http://www2.dep.state.fl.us/waste/programs/brwnfld>; or contact Minnie Robinson at (850) 487-2776 to receive a hard copy by mail.]**

One participant asked whether the focus group considered the issue of requiring financial assurances to be able to use an engineering control (EC). Roger said they did consider this. Financial assurances and institutional controls go along with EC.

One participant raised a policy question: When is it appropriate to use an EC in lieu of cleanup?

Another participant asked what experience the DEP has with EC's? DEP staff responded explaining that it is a site-specific decision taking into account such things as soil properties, potential for leaching, the cost to complete cleanup, whether the EC is practical, whether natural attenuation will occur, etc.

One DEP staff person gave an example of an EC: a highly urbanized setting may provide an existing "surface cap"; e.g., the Northern Downtown Orlando solvent plume site.

Roger reminded the group that the paper only looks at contaminated soils, not groundwater.

Another DEP staff person pointed out that we must consider if the EC is commensurate with the fate of the chemical (i.e., will it naturally attenuate before the EC fails).

**One suggestion was to add "Solidification in Place" to the list of EC's.**

**Tim Varney asked the focus group to expand on current paper and add narrative regarding examples of site-specific scenarios where an EC has worked. Another participant requested that they add a summary of all sites where DEP has authorized an EC.**

Another policy question raised was what length of time is appropriate to allow an EC to be used? Forever? One DEP staff person pointed out that a significant rain event (such as in Pensacola recently from the hurricane) can wash away 2 feet of top soil cover, so we need to be very careful what type of EC's we allow.

One participant suggested that we consider requiring a permit application to use EC's and/or IC's, thus requiring renewal every few years with the applicant coming back to DEP to justify permit renewal with assurances that the EC and/or IC is still effective. This would generate fees to be used as a resource to fund inspection programs, etc. DEP wouldn't have to worry about lack of resources because the burden is on the applicant to maintain the controls. One response to this idea was that we would need statutory authority to implement this type of requirement.

Ms. McCoy expressed concern about this issue stating that 30 years operation and maintenance on a surface cap is inadequate. What happens after 30 years? She believes maintenance and inspections are not reliable. Ms. Margaret Larkins requested that the record reflect that the Wingate site is located at NW 31st Street and her residence is at NW 28th Street.

### **Institutional Controls Focus Group**

**Geoff Smith presented this group's paper. He noted that he was late in writing the report, so there was no review by other focus group members, and he relied heavily on the information provided by Rebecca Grace and Lisa Duchene. [You may download a copy of this paper from the Internet at: <http://www2.dep.state.fl.us/waste/programs/brwnfld>; or contact Minnie Robinson at (850) 487-2776 to receive a hard copy by mail.]**

Geoff read the following list of examples of land use changes to demonstrate the need to take into account future land use and the importance of ensuring that Institutional Controls (IC's) remain in place:

Old Use:

1. old paint factory
2. old tank storage yard
3. manufactured gas plant
4. MSW incinerator sites
  
5. MSW ash dumps
6. abandoned shipyard
7. dumps
  
8. wood treatment residuals lagoon
9. mosquito control yard
10. chemical waste dump
11. agricultural (cattle dip sites)

New Use:

- sports complex  
kids campus, museum  
marina  
elementary school, head start facility, parks,  
community center  
housing (400+/- homes), elementary school, playground/park  
hotel  
parks, shopping centers, office parks, housing, schools,  
HUD housing, church.  
residential housing  
park  
university conference center/hotel  
elementary school, housing

Geoff asserts that without a legislative fix, the use of IC's is very uncertain. It should be a last resort. Geoff raised the policy question: When is it appropriate to allow IC/EC in lieu of cleanup?

Geoff quoted Florida case law regarding the Marketable Record Title Act (MRTA) and stated that the concern is that under this existing law, deed restrictions can be extinguished after 30 years of consecutive ownership.

**One participant commented that Bankers need to be at the table for this discussion. Another participant suggested that we need to bring in Real Property Lawyers. Everyone agreed.**

**Several participants suggested we look at other state's laws to see how they're addressing this problem. The National Conference of State Legislatures (NCSL) will have this type of information regarding how other state's have passed legislative fixes to override MRTA.**

Someone pointed out that one problem with using permits as IC's is that a permit wouldn't apply to subsequent owners. One DEP staff person noted that it depends on the program. In the RCRA program, the new purchaser is responsible for maintaining controls, monitoring, financial assurances, etc.

Another topic raised was the issue of Taking. One attorney expressed concerns that changes to the law that would make the IC/EC law more enforceable (e.g., exclusion from MRTA) could result in assertions of "taking" even if DEP is not forcing the IC on the real property owner. The fact that the law may affect property values by making the property less marketable could be construed as a taking.

**DEP staff asked the focus group to look at existing authority to create a state registry. Do we have the authority to do this? Look at Florida law when comparing other state's laws to make sure their laws wouldn't run contrary to the existing Florida Constitution and statutes.**

### **Environmental Equity & Justice (EEJ) Focus Group**

Richard D. Gragg III Ph.D., Director of the Center for Environmental Equity and Justice in the Environmental Sciences Institute at Florida A&M University, gave an overhead presentation

entitled "Environmental Equity And Justice Issues In The United States."

The following are highlights of his presentation:

There are various definitions associated with EEJ including the following: (1) racial minorities and low-income people bear a disproportionate burden of exposure to toxic pollutants and any resulting health effects; (2) a debate about everyone having equal access to environmental protection, not environmental pollution; and (3) some exposure to environmental hazards is inevitable, and the burdens of that exposure are measurable; the goal of policymakers should be to ensure that the burdens of exposure are distributed fairly among all segments of the population.

Dr. Gragg identified the following public policy and research challenges: (1) a valid measurement of the sources of pollution to which people may be exposed; (2) a valid model that describes the relationship between proximity to those sources and the likelihood of exposure; (3) incorporating qualitative and human health data in risk models; (4) cancer versus non-cancer endpoints; (5) lack of control for a variety of background factors; (6) use of census tract or block group demographics; (7) use of geographical information systems.

Dr. Gragg noted that there is limited data to explain the environmental contribution to the clear differences between racial groups in terms of disease and death rates. For diseases that are known to have environmental causes, data are not typically aggregated by race and socioeconomic group. There is a need to develop biomarkers of exposure, effect and susceptibility and to develop criteria for overburdened communities. They also need to establish legal precedents.

Environmental equity and justice is an evolving issue. The question of whether racial minorities and low-income people bear a disproportionate burden of exposure to toxic pollutants and any resulting health effects has been the subject of growing concern over the past decade. The issue has become one of the top priorities of the Environmental Protection Agency, following the issuance of the Clinton administration's executive order 12898. The issue is also more prominent and widespread at the local and state levels. Florida is at the forefront of those states beginning to address this important human issue. Florida's continued and evolving commitment can bring about a national model for resolution.

Dr. Gragg also described the Center for EEJ: its main focus is health effects issues; also, they are hiring a molecular epidemiologist to establish biomarkers and they're establishing an environmental hazard inventory.

**Dr. Gragg requested that the CSF define exactly what we want from the EEJ Focus Group. One participant asked that the EEJ focus group come up with recommendations for how to integrate the EEJ issue into all the other CSF issues.**

Ms. McCoy stated that they have the burden to prove they are the victims, and then they have the burden to prove the synergistic effects. Communities want their rights back under the 14th amendment. They have to sue and go to court just to have a clean place to live. There's no requirement to look at current impacts to the people (e.g., existing health problems) when a site is assessed. We need to add the human element to the analysis.

One participant asked: How do we get the word out to the communities? Dr. Gragg said part of the solution is these forums allowing them an opportunity to air their issues and then have people take this back to their agencies.

**Ms. McCoy suggested that we look at the worst sites in the state and convene a summit in the area that has the impacted community. There are 300 groups across the country. The EEJ Focus Group can help us identify the leaders of groups in Florida.**

Tim Varney noted that there has been a 28% increase in childhood asthma in minority children in the last decade. This is just one example of the impact of environmental hazards on these communities.

### **Geographic Information Systems (GIS) Tracking Focus Group**

DEP employees Mark Dietrich and Dixie Davis gave a very informative GIS presentation that helped the CSF better understand the capabilities of GIS and how we might use it to track contaminated sites and relevant information about the sites such as applicable IC/EC.

They explained that you can access more information about the Data Layers within the GIS system at DEP. This is called "metadata" (i.e., data about data). There is also a DEP GIS Book that is a compilation of all GIS Projects in progress with a contact name.

GIS is much more than map making. It is a database which links features on the earth with descriptive information called attributes. GIS integrates information across projects, environmental media, organizational programs, and political boundaries. Examples of the types of questions GIS can answer include: "What is the susceptibility of drinking water wells to contamination threats?" and "What is the number of people affected by potentially contaminated public drinking water wells within a 1/2 mile radius of the state's Drycleaning Solvent Cleanup Program sites?"

One way GIS can be used as a powerful tool to facilitate environmental protection is to use it for "Susceptibility Determination" (i.e., inventory and assessment of potential contamination sources; and determination based on aquifer vulnerability to contamination threats such as chemical spills or leaking underground storage tanks.)

The following is a list of GIS Web Sites:

FDEP: <http://10/29/98/www.dep.state.fl.us/gis>

SGS: <http://10/29/98/www.usgs.gov/research/gis/title.html>

SEPA: <http://10/29/98/www.epa.gov/ceisweb1/ceishome/atlas/learngeog/learnmaps.html>

SRI: [http://10/29/98/www.esri.com/library/gis/abtgis/what\\_gis.html](http://10/29/98/www.esri.com/library/gis/abtgis/what_gis.html)

DM: <http://10/29/98/www.hdm.com/gis3.htm>

**For more information, contact BIS GIS: (850) 488-0892; ask for Dixie Davis.**

DEP staff mentioned that the department received a grant from EPA to clean up the data in our existing GIS databases; e.g., to correct lat/longs for gas stations currently listed in the Gulf of Mexico.

**Meeting Adjourned.**

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## Memorandum

# Florida Department of Environmental Protection

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**TO:** Contaminated Soils Forum Participants  
Interested Parties

**FROM:** Douglas A. Jones, Chief  
Bureau of Waste Cleanup

**DATE:** September 18, 1998

**SUBJECT:** Focus Group Papers for Upcoming Contaminated Soils Forum Meetings

At the last Contaminated Soils Forum (CSF) meetings held August 17-19, 1998, each of the Focus Group Leaders agreed to submit papers outlining their group's issues and possible solutions by September 21, 1998. Department staff agreed to make these papers available prior to the next CSF to provide interested parties the opportunity to review the papers to facilitate discussions during the next meeting. The next CSF will be held September 30 - October 2, at the Orlando Public Library, 101 E. Central Blvd., Orlando (407/425-4694). Due to the short time frame between the deadline for paper submittal (9/21/98) and the next CSF (9/30 - 10/2), we are making the papers available via the Internet to help disseminate the information quickly.

We will add the documents to our web page as quickly as we receive them; however, due to workload constraints it may be several days before all of the information is posted on the web page. Please check each day to review updated information. You can download each focus group's paper at the following Internet website:

**<http://www2.dep.state.fl.us/waste/programs/brwnfld>**

If you do not have Internet access, please contact Minnie Robinson in the Bureau of Waste Cleanup at (850) 487-2776 to request a hard copy via U.S. Mail. We ask that participants please bring along their copies of the papers to the next CSF, since there will be a limited number of copies available at the meeting.

If you have general questions about the Contaminated Soils Forum, please contact Roger Register, Lisa Duchene or Doug Jones at (850) 488-0190.

**Florida Department of  
Environmental Protection**

**Memorandum**

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**TO:** Contaminated Soils Forum Participants  
Interested Parties

**FROM:** Douglas A. Jones, Chief  
Bureau of Waste Cleanup

**DATE:** August 31, 1998

**SUBJECT:** Minutes of August 17 - 19, Contaminated Soils Forum Meetings

The minutes of the Contaminated Soils Forum meetings held during August 17 - 19 are enclosed for your review. The department staff tried to provide as much of the substance of the meetings as possible since it seems important to convey the variety of perspectives represented at the forum. For those who choose not to read the entire document, **we have highlighted key topics, decisions made and focus groups in bold type.** One item that was agreed to was that the minutes of the previous meetings will be reviewed and approved by participants as an initial action at subsequent meetings.

Also enclosed is a "Contacts List" of those who volunteered for each of the focus groups. The list includes telephone numbers and e-mail addresses to facilitate communication among members. If you wish to participate in a focus group, please contact the group leader where one is indicated or, if not, any member of the group for further information.

The next series of Contaminated Soils Forum meetings will be during September 30 - October 2, at the Orlando Public Library, 101 E. Central Blvd., Orlando (407/425-4694).

Policy Group	Wednesday, September 30	9:00 a.m. until not later than
Science Group	Thursday, October 1	4:00 p.m.
Application Group	Friday, October 2	9:00 a.m. until not later than
	9:00 a.m. until not later than	4:00 p.m.
	4:00 p.m.	

Although an agenda has not yet been developed for the next series of meetings, the discussion will center on presentations by the focus groups that have been established. If you have general questions about the Contaminated Soils Forum, please contact Roger Register, Lisa Duchene or Doug Jones at 850/488-0190.

Enclosures (2)

**Contaminated Soils Forum**  
**Contacts List**

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Environmental Equity & Justice Focus Group

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**Science Sub-Group**

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Methodology Focus Group (continued)

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**Application Sub-Group**

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Environmental Equity & Justice Focus Group

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Institutional Controls Focus Group

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# Contaminated Soils Forum

Tallahassee, Florida

August 17-19, 1998

## Minutes

### August 17, 1998: Policy Sub-Group

**Tim Varney was selected as Chairperson of the Policy Sub-Group. He reviewed the list of issues from the July 2, 1998 meeting of the Contaminated Soils Forum (CSF).**

**The first issue discussed was the need for a unified rule; i.e., one rule that would govern all types of cleanup.** Currently, the DEP has authority for cleanup rules in the petroleum, brownfields, and drycleaning programs. Due to different adoption dates of these rules and evolving science, there may be different cleanup target levels (CTL's) in each rule for the same chemical constituents. The unified rule could establish CTL's that would be updated periodically (e.g., annually) and the other program rules (petroleum, brownfields, and drycleaning) would just cross-reference the unified rule.

Questions remain regarding whether the unified rule should apply to all types of cleanup, even non-program sites (e.g., non-specific groundwater contamination cleanup sites, RCRA sites, Superfund sites, etc.) as well as Soil Treatment Facilities and Ash Re-use scenarios; or whether it should only apply to petroleum, brownfields, and drycleaning program sites. Questions arose regarding whether there exists sufficient statutory authority for DEP to adopt a unified rule now. There was not consensus on whether the unified rule should apply to all types of cleanup or just the three program areas.

Also, concerns were expressed regarding whether the unified rule would take into account the human factor. Based on existing knowledge of five types of cancer and 22 other types of illnesses at the Wingate Superfund site, concerns were raised regarding the need for human health assessment near contaminated sites.

Several attendees commented on whether a "risk range" should be considered similar to EPA's range from  $1 \times 10^{-4}$  to  $1 \times 10^{-6}$ . Currently, the DEP uses the one in a million ( $1 \times 10^{-6}$ ) risk level established by the Florida Legislature in the petroleum, brownfields and drycleaning programs.

Community activists affiliated with the Wingate Superfund site expressed concern about the difference between EPA's standards and the State of Florida's standards for cleanup. They urged the state to protect its people from the contaminants and retain the one in a million risk level.

Concerns were expressed regarding the regulated community's fear of "soil cops"

pursuing enforcement and requiring cleanup of any soil exceeding CTL's in a unified rule; e.g., agricultural soils, golf courses, etc. (pesticides and fertilizers). In many cases, these exceedances are a result of legal application of these products.

The issue of interstate commerce concerns was also raised; i.e., how should commodities coming into Florida from other states be addressed (such as concrete beams constructed with waste-to-energy re-used ash)?

There was discussion regarding whether we can reconcile adjusting CTL's with Environmental Equity and Justice (EEJ); i.e., does allowing different standards create an inherent inequity? Several attendees felt that the Brownfields process addresses this through notice requirements, and they believe the two are compatible as long as there is the discussion and debate involving the affected community.

There was discussion regarding what the community's level of trust is for the government and scientists generally. Concerns were expressed about the low level of trust. One attendee questioned what the community activists wanted specifically regarding the unified rule. They stated that they do not want to see the one-in-a-million cancer risk level undercut. They emphasized that due to poor zoning in their communities, they have a patchwork of commercial and residential areas with no buffers, so allowing different cleanup standards (a risk range) for residential versus commercial/industrial is not acceptable.

One attendee questioned whether the policy group should recommend that DEP seek funding to create more community involvement to address EEJ issues. Another attendee pointed out that often government agencies don't realize the communities' real concern, which is their health. Another attendee stated that too often the DEP relies on the local government process to address community concerns.

**Chairman Varney asked the group to narrow the issues down to 2 or 3 to focus and formulate a plan. The group voted to address three issue areas: (1) Cleanup; (2) Re-use; and (3) EEJ and Communication.**

## **Cleanup**

There was continued discussion regarding whether the DEP has authority to regulate soils at non-program sites. There was consensus that the DEP has the authority to apply soil CTL's (SCTL's) at petroleum, brownfields and drycleaning sites, and at non-program sites the DEP has authority to apply the leachability SCTL's. It is not clear whether the DEP has authority to apply the Direct Exposure SCTL's (based on ingestion, dermal contact and inhalation), but some believe under the new Tomoka case<sup>1</sup> the DEP has this broad authority. Other CSF attendees disagreed.

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<sup>1</sup> Chris McGuire, DEP Assistant General Counsel, gave a summary of the case at the August 19, 1998 meeting of the CSF; however, since the case was mentioned during the first day of the CSF, the summary is given here. On July 29, 1998, the 1st District Court of

There was also discussion regarding the difference, if any, between "CTL's" and "standards"; and concerns were raised regarding the legal significance of the term "standard" as it relates to Chapter 403, Florida Statutes (F.S.), and fines and penalties in the enforcement context for violation of a "standard".

**Following the lunch break, the following issues were framed and volunteers agreed to bring "working drafts" to the next CSF framing the issues in more detail and listing possible solutions and/or recommendations.**

**Three main Cleanup issues:**

- 1. Consistency (program vs. non-program sites; straightforward exercise comparing rules and looking at existing authority); Geoff Smith volunteered for this issue.**
- 2. Standards vs. CTL's; and point value for risk; Bob Wells volunteered for this issue.**
- 3. The need for "universal" application of Risk-Based Corrective Action (RBCA) across program and non-program sites; Mike Petrovich volunteered for this issue. (Due to potential overlap with issue 1, Mr. Petrovich and Mr. Smith will discuss their respective assignments to reduce overlap and duplication of effort.)**

**Re-Use**

This issue has arisen due to regulated community stakeholders approaching the DEP seeking approval for re-use of various substances and contaminated media, and guidance on how clean it has to be.

DEP staff noted the discrepancy between the two sets of CTL's in the compost rule and the petroleum/brownfield rules. The DEP staff urged this group to focus on soils, soil-like media, and re-use materials applied to soils that could result in contaminating that soil, and address the issue of whether a re-use site located adjacent to a contaminated site should be subject to different CTL's.

**Chairman Varney summarized three categories of tasks under the Re-use topic:**

- 1. Identify those materials for which there is specific regulatory authority (e.g., recovered screen material from construction and demolition**

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Appeal issued its decision in the Tomoka case (St. Johns River Water Management District v. Consolidated-Tomoka Land Co.). An Administrative Law Judge ruled that a proposed rule was invalid because the statute it implemented was not specific enough. The Court overturned this ruling and held that the proper test to determine whether a rule is valid is a functional test based on the nature of the power or duty at issue and not the level of detail in the language of the applicable statute. This decision did not set forth any clear guidance for determining when rules will be deemed valid, and will have to be fleshed out in future litigation or legislation.

debris, ash residue from the combustion of solid waste, compost, biosolids)

2. Identify those materials for which there is no current specific regulatory authority, but they need to be looked at immediately (e.g., stormwater swale and pond cleanout material, street sweepings, industrial byproducts, manufactured soils, drinking water treatment sludges, phosphogypsum)

3. Identify "products" rather than wastes which may pose a contamination threat to soils (e.g., arsenic based pesticides, KO-61 hazardous wastes used in fertilizers, CCA treated lumber and lead shot used in skeet ranges)

**Volunteers:** Bill Hinkley offered to take the lead on this issue with assistance from: Diana Davis, Tom Roberts, Marc Bruner, Bob Johns, David Dee, Bill Darcy, Norm Thomas, Dorothy McGlincy and Paul Hurst.

## **EEJ**

One attendee questioned whether the DEP needed additional statutory authority and resources to address this issue. Another issue raised is whether this is a DEP issue or a Department of Community Affairs (DCA) issue. Last year's legislation requires the DCA to determine whether a community is "environmentally over-burdened".

DEP staff pointed out that they served as staff to the Environmental Equity & Justice Commission (EEJC) and they used GIS and census block data to look at this issue. It is not a clear cut issue; e.g., data showed sites in poor and minority neighborhoods, but also found landfills sited in wealthy neighborhoods.

According to staff from the Center for EEJ at FAMU, the only data they have is proximity data; i.e., demographics of who lives near the site, but they don't have much data regarding the impact to the community. Their big concern is non-cancer endpoints such as respiratory problems and behavioral problems, and synergism.

**The following issues were listed as needing further attention under the EEJ category:**

1. Public notice and participation
2. Improved mechanism for tracking sites
3. Establishing an EEJ Office within the DEP
4. Ensuring that the  $1 \times 10^{-6}$  cancer risk level is maintained
5. Multiple sites within an area (whether cumulative risk increases)
6. Consideration of special populations and susceptibilities (the need for health assessments) to discover "Biomarkers" or "Body Burdens"; e.g., an area with high incidence of pediatric asthma.

**Volunteers:** Dr. Richard Gragg, Leola McCoy and Audrey Peterman

**August 18, 1998: Science Sub-Group**



**Tim Varney was selected as Chairperson of the science sub-group. He reviewed the issues outlined at the July 2, 1998 meeting of the CSF including CTL's for unrestricted use, unaffected background, emerging science, special scenarios, and ecological risk.**

**Chairman Varney asked Dr. Steve Roberts, a toxicologist from the Center for Environmental & Human Toxicology, University of Florida, to explain the process used to develop the SCTL's for the DEP's petroleum and brownfields cleanup criteria rules.**

Dr. Roberts explained that they modified and adopted existing formulae from EPA and other states, including EPA's risk-based screening tables and National EPA Soil Screening Guidance. They considered all three exposure pathways (dermal, ingestion and inhalation), and looked at chronic exposure as well as acute exposure from ingestion of soil by a child. The SCTL's are intended to be protective at the  $1 \times 10^{-6}$  cancer risk level and hazard index of 1 or less. They considered cancer and non-cancer health endpoints. The acute toxicity numbers were based on data supporting that children ingest more soil than adults do. Most of the SCTL's are based on chronic exposure (200 mg/day), but this is not protective for certain contaminants for a handful of dirt ingested at one time. There are studies on such events, although not pica children (involving normal children that ingest larger quantities; e.g., 10 grams or more once per year.) Based on these human studies, they used available data to adjust the SCTL's for approximately a half dozen chemicals.

Concerns were expressed that other EPA Regions (e.g., Region 9) use a different number for arsenic, and they questioned whether the natural background for arsenic was factored into the SCTL's. Dr. Roberts explained that the SCTL's are purely risk-based default numbers, and that natural background can be considered on a site-specific basis to decide if an alternative CTL should be established.

There was some discussion about the draft report by Lena Q. Ma entitled "Background Concentrations of Trace Metals in Florida Surface Soils" which states that the geometric mean of arsenic in Florida is .42 mg/kg. DEP staff pointed out that this is a draft report that is currently under review and may change.

Concerns were expressed regarding impacts to pregnant women and the elderly. Dr. Roberts explained that the toxicity values are derived using the whole population and do include pregnant women and the potential reproductive effects of the chemicals; the process is designed to identify the most sensitive populations.

Dr. Roberts also explained the reference to the "Aggregate Resident" in developing the SCTL's. They begin with an assumed 30-year exposure (the amount of time a person might live in one location), and they begin that 30-year period with childhood. Because a child's body weight changes as he/she grows, and body weight affects the risk equation, they must factor this in, and therefore, develop the "aggregate resident".

Another attendee pointed out that there is a need to communicate to the public that one in a million means that is the threshold protection level, but many of the numbers are even more protective than that. Another attendee referred to the "Non-threshold responses" theory, which EPA is considering.

Dr. Roberts pointed out that there needs to be a greater effort to communicate to the public that the built-in conservatism serves the purpose of addressing the sensitive populations; i.e., children, elderly, pregnant women, etc.

One attendee questioned the peer review process used in developing the SCTL's. Dr. Roberts explained that the peer review process occurred as part of the public rule workshop process. Several attendees stated that objective peer review is needed, but it's difficult to find scientists who are removed from the process and willing to peer review for free. Discussion ensued regarding whether a funding mechanism for independent peer review should be pursued through the legislature.

One attendee asked what digestion method was used to develop the SCTL's? DEP staff stated that generally they use the total recoverable digestion technique, but Lena Q. Ma used the triple acid total total digestion method using EPA Method 3052.

One attendee commented that inflexible reliance on the Integrated Risk Information System (IRIS) is not appropriate; an opportunity to consider new scientific studies must be provided.

There was discussion about ecological risk and the fact that the SCTL's only consider impacts to humans, not plants and animals. However, the RBCA statutory language refers to establishing cleanup criteria that is protective of human health *and the environment*.

**The following focus groups were established with volunteers listed:**

- 1. Communication Focus Group: Linda Lampl (point person); Michael Hartman; and Audrey Peterman.**
- 2. Methodology Focus Group (to consider development of SCTL's; application of RBCA decision-making; consistent numbers across programs; risk assessment methodology; and the uncertainty of risk assessment): Bob DeMott (point person); Jim Frauen; Steve Roberts; Christine Halmes; Mike Petrovich; Tom Roberts; Ed Zillioux; Ken Watson; Mark Mechling; Jan Barnes; Patrick Byers; Doug Covert; Chris Teaf; Ligia Mora-Applegate; Zoe Kulakowski; Prasad Kuchibhotla; Robert Johns; Keith Tolson; Bill Colona; and Richard Lewis.**
- 3. Peer Review Focus Group (identify needs and possible mechanisms): Steve**

**Roberts (point person); Doug Dutton; Mike Petrovich; Ed Zillioux; Patrick Byers; Bob DeMott; and Richard Lewis.**

**4. Ecological Risk Focus Group: Ed Zillioux (point person); Tom Seal; Chris Saranko; Christine Halmes; and Michelle Allard.**

The group agreed that Chairman Varney should send a letter to Department of Health (DOH), Department of Agriculture and Consumer Services (DACCS) and Department of Community Affairs (DCA) inviting them to attend and participate in future CSF's. Also, one attendee suggested that the department issue press releases advertising these meetings in all major newspapers around the state and include the minority media and black colleges and universities.

**The group also agreed to have DEP staff serve as co-chairs for each of the three CSF sub-groups: Policy, Science and Application.**

**Focus groups need to have something on paper to present to next CSF large group. Should complete work product to be mailed out by September 21, 1998.**

**August 19, 1998: Application Sub-Group**

**Tim Varney was selected as Chairperson of the Application Sub-Group.**

**Focus Group papers are due September 21, 1998.** A DEP staff person suggested creating a website to be able to put all the meeting minutes and focus group papers out on the Internet; everyone agreed this was a good idea.

**The first topic discussed was "Assurances"; i.e., Institutional Controls (IC) and Engineering Controls (EC).**

Community activists expressed concerns regarding the need for a reliable database to track the information that runs with the land, so that 30 years from now people will know if contamination remains on the land.

DEP staff explained the current process used to implement IC in the petroleum program: the DEP is a party to (signs) the Deed Restriction; it is filed with the local government; and the DEP has to agree to remove the Deed Restriction and sign off on the removal from the deed record.

One attendee questioned the limits on enforceability of IC/EC due to existing Florida Law such as the Law Against Perpetuities. No one had an answer to this question.

DEP staff noted similar concerns regarding enforceability due to lack of resources. Also, noted that other states are using a registry (available via the Internet) listing

contaminated sites and IC/EC, but there are still potential problems with data entry error and concerns remain about enforceability without resources to provide annual inspections.

One attendee compared a site subject to IC/EC with a site receiving a No Further Action (NFA) without conditions, arguing that both should be subject to self-reporting on the part of the owner. If contaminant levels rise at the site with the NFA, the owner would have to report to the DEP and be subject to statutory reopener provisions requiring further cleanup; the same should apply at the IC/EC site. Others disagreed with reliance on self-reporting asserting that it is not a valid assurance to protect human health and the environment.

One attendee introduced the notion of maintenance of IC/EC as "stewardship" and asserted that there needs to be a mechanism to fund stewardship.

One local government representative explained that they integrate this environmental issue with the zoning and building department, so sites with contaminant levels above CTL's are "flagged" and a building permit cannot be issued until the Zoning Department checks with the local environmental agency to ensure the proposed project is consistent with the approved land use under the IC/EC. Another local government noted they are successfully using GIS to track sites.

There was discussion about the need for this issue to be addressed by local governments; i.e., enforcement of IC/EC at the local level due to DEP's lack of resources to be able to track state-wide. One problem with this idea is that the local governments will have the same objection: lack of resources. If attempts are made to mandate this responsibility to the local governments through legislation, they are likely to argue that it is an unconstitutional unfunded mandate under existing Florida law.

DEP staff noted that the department may have an obligation to establish a state registry, but because DEP lacks the resources to enforce IC/EC, we need to consider shifting that burden to the private sector; i.e., requirements placed on realtors, bankers, etc. One problem was pointed out with this approach: the realtors and bankers would only be involved when there was a land transaction. What about other changes in exposure scenarios that could occur between sales of the property?

One possible solution offered was to require a financial assurance mechanism to ensure maintenance of the IC/EC.

There was also discussion about whether the law allowed IC/EC as an option at the discretion of the owner or at DEP's discretion. The DEP staff believes that the statute authorizes IC/EC as a component of RBCA, and the DEP has an obligation to implement RBCA pursuant to the statute. The statute allows IC/EC as an option and the DEP's rules provide more details regarding when IC/EC may be appropriate.

There was further discussion regarding the policy issue of whether some line should be drawn to establish when it's acceptable to allow IC/EC versus requiring complete cleanup; e.g., IC/EC may be more acceptable at petroleum sites because of their temporary nature due to natural attenuation cleaning up any remaining contamination within a fairly short time period. However, in other scenarios such as re-use we are dealing with metals, which will never naturally attenuate. Since they'll remain at the site forever, should IC/EC be prohibited?

DEP staff noted that the legislature appeared to intend to distinguish between water and soil; i.e., with respect to water there is clear intent to restore the resource; however, with contaminated soils, the department may allow IC/EC, if the soils are not leaching to groundwater.

One attendee questioned how IC/EC would be applicable to the re-use scenario where often the materials are mixed and diluted to the point where the original material is gone. If the re-use material is undiluted and used as a whole product (e.g., Recovered Screen Material as road-base) then IC/EC may be applicable. Perhaps application of whole re-use materials could be limited to uses where controls are in place inherently; e.g., an interstate road bed will likely always be there. DEP staff disagreed pointing out that roads can be torn up, moved, etc., so there are no inherent controls.

One DEP District staff person noted that their experience in the district is that property owners consider using IC/EC, but when they realize it will be a "cloud on their title" they often decide to just do the cleanup. One attendee questioned whether we've seen a lot of problems with this issue already, or if we are making an issue out of something that isn't. DEP staff noted that it is still too early to tell with respect to the cleanup programs, but that it is an immediate issue for the re-use scenario.

Community activists expressed concerns about IC/EC and believe they will not be enforced. They assert that we can't rely on "self-policing" because the property owners don't care about maintaining IC/EC any more than they cared about polluting the property in the first place.

DEP staff also raised the issue of whether it is appropriate to consider other types of IC besides Deed Restrictions, such as local zoning, when the only problem at the site is organoleptic (i.e., smells or tastes bad) and contaminant levels do not pose a health threat.

DEP staff also noted that this is a national problem that all states and EPA are struggling with, so we need to look to them to see about possible solutions. EPA Headquarters has recently published guidance on this issue titled "Institutional Controls: A Reference Manual". We can also look to other states' laws for possible solutions; e.g., ways to deter breach of IC/EC and encourage self-policing could include legislative authority for strong fines and penalties for breach and a random audit/inspection program. We also need to look at existing Florida law including the

Rule Against Perpetuities and Florida's Marketable Record Title Act to see if they invalidate deed restrictions after a certain number of years. This could be addressed legislatively with an exemption from these laws in the IC/EC section of the RBCA statute.

Group consensus was that we need to ensure that both the cleanup and re-use issues are addressed together by the whole group; i.e., need to avoid splintering and creating separate solutions for each which could negatively affect the other issue.

**The following four focus groups were formed with volunteers listed:**

- 1. Engineering Controls Focus Group (to consider adequacy of EC options currently available): Roger Register (point person); David Gerard; Bob Wells; Jan Barnes; Richard Tedder; Lee Martin; and Kathryn Salvador.**
- 2. GIS Tracking Focus Group (to consider what's available; its capabilities and constraints; combining it with other software and relational databases; diagnostic predictive standpoint; conversion costs; and the issue of where are the data?): Roger Register (point person)**
- 3. Environmental Equity & Justice Focus Group: Dr. Richard Gragg (point person); Audrey Peterman; Leola McCoy; Bill Hinkley; Fletcher Herrald; and Rebecca Grace.**

DEP requested that someone from the Environmental Equity and Justice Commission (EEJC) give a short presentation on the EEJC Report at the next CSF meeting in Orlando providing an overview of the report's background information, findings and recommendations. Dr. Gragg agreed to arrange this.

DEP staff noted that the EEJC report mainly focused on siting of hazardous facilities, and requested that the presentation include the connection between EEJ and cleanup (where contaminated sites already exists, so it doesn't involve a siting issue.)

- 4. Institutional Controls Focus Group (to consider what IC options are available currently; what notice requirements exist; and what effect does current law have on IC's?) Geoff Smith (point person); Mike Petrovich; Marc Bruner; Rebecca Grace; Lisa Duchene; Bob Wells; Chris McGuire; and Mike Sole.**

## July 2, 1998 Contaminated Soil Forum Summary Report

The first Contaminated Soil Forum meeting convened in Room 609, Twin Towers Building, Tallahassee, Florida at 9:00am. John Ruddell, Director, Division of Waste Management, introduced key staff in attendance and explained the intent and purpose of the Forum.

The Forum was established in response to requests made at the April 30 Environmental Regulation Commission adoption hearing for the Brownfields Cleanup Criteria Rule, Chapter 62-785, F.A.C. Representatives of the chemical industry and an environmental group asked that the department support a continuing dialogue regarding the evolving science associated with risk assessment and Risk-Based Corrective Action (RBCA).

The following excerpt from the public notice for this meeting captures the essence of Mr. Ruddell's opening comments: The Forum is intended to provide an opportunity for interested parties to discuss evolving technical and scientific issues associated with contaminated site cleanup and the re-use of a variety of media, including soils, sludges, ash, and recovered screen material, using risk-based management principles. Policy and legal issues may be included in the discussion, as appropriate. The purpose of the initial meeting will be to briefly review the status of a variety of current department activities involving these issues, develop consensus on the scope of topics to be addressed at future forums, develop an agenda for the next forum, and to establish any goals for work products that the participants agree upon.

During the morning meeting, Forum participants listed issues for future discussion including the following:

1. Cleanup Target Levels (CTL's) for unrestricted use of contaminated sites (input assumptions and calculations used in developing CTL's)
2. Assurances (i.e., legally enforceable institutional and engineering controls)
3. Emerging Science relevant to RBCA
4. Special Scenarios (e.g., construction sites) to avoid repetitive site-specific risk assessments (i.e., what standard scenarios can be agreed upon other than residential and industrial land uses?)
5. The possibility of a "Unified Rule" (i.e., one department rule providing the Soil CTL's for all types of cleanup and re-use scenarios, instead of the current situation in which there are separate rules for petroleum cleanup, brownfields cleanup, and drycleaning solvent cleanup and each rule may have different CTL's for the same constituents because of the evolving science and the different rule adoption dates.) A related issue is Statutory Authority for this type of rule.
6. Gap between EPA Superfund Program cleanup goals and Florida's CTL's
7. Issue of what to do when EPA has not published a reference dose in the Integrated Risk Information System (IRIS) or the Health Effects Assessment

Summary Tables (HEAST), and therefore, none is provided in a Risk Assessment. Should we be considering other studies and scientific evidence even if EPA has not yet finished its re-assessment of a particular constituent; e.g., dioxin?

8. The uncertainty of Risk Assessment (RA) and the Precautionary Principle (i.e., the hazards that can't be quantified still need to be considered when making risk management decisions.)

9. Environmental Equity and Justice (EJ)

10. Ecological Risk

11. Unaffected Background (scientific question re: how to establish what the unaffected background concentration is)

12. Background as a factor to consider in determining whether to establish an Alternative CTL (ACTL) (policy question of whether a less stringent ACTL should be allowed based on existing concentrations of a particular contaminant in a regional area)

13. Interim Guidance for applying Brownfields CTL's in other contexts (e.g., permit applications in other program areas.)

14. GIS Mapping to track Institutional Controls

15. Benefits of Re-use (cost-benefit analysis to evaluate whether the benefits of re-use warrant using less stringent CTL's for re-use scenarios versus cleanup scenarios)

During the lunch break, DEP staff grouped these issues into the following three main categories:

<u>Policy</u>	<u>Science</u>	<u>Application</u>
Unified Rule	CTL's for unrestricted use	Assurances
Interim Guidance	Unaffected Background	GIS Mapping
Benefits of Re-use	Emerging Science	Environmental Equity
Uncertainty of RA	Special Scenarios	and Justice
Background	Ecological Risk	
EPA Relations		
Pesticides/fertilizers		

When the forum reconvened after lunch, participants continued to discuss these issues and groupings. The sub-group headings were approved. These three sub-groups of the Contaminated Soil Forum will be meeting August 17-19, with one full day devoted to each sub-group. A public notice will be published in the FAW and mailed to interested parties in the near future to provide meeting details.

For more information, contact Roger B. Register at (850) 488-0190.