

Remarks to Phytoremediation Conference.

Thank you, Felicia, for that introduction.

It is a great pleasure to be here to help kick off this third International Conference on Phytoremediation. I want to especially welcome those of you who have come from overseas to present and attend the conference.

I also want to thank EPA's Office of Research and Development and Office of Solid Waste and Emergency Response, in addition to the other co-sponsors, the Midwest Hazardous Substances Research Center, Chevron/Texaco, the BP Corporation, and ITRC, for your leadership in making this conference possible.

The topic I've been asked to speak briefly about this morning is Region 4's perspective on phytoremediation and its uses.

I must admit that, for me, even offering an opinion about perspectives on phytoremediation to a room full of experts on the subject, is enough to cause heart palpitations and seems rather presumptuous.

My assumption is that Felicia asked me to speak to this not because I have any particular expertise in phytoremediation, which she well knows, but rather for me to consider from the vantage point of someone in an EPA Regional office why this topic is so important.

So to do that, let me first talk about what that vantage point is, then talk briefly about some of the opportunities for phytoremediation which we've seen here in Region 4.

I will assume for this discussion that while many of you understand perfectly what the relationship of EPA Regions is to our Headquarters offices and our State and local government partners, this understanding may not be universally shared.

Actually, you could have a conference just on that topic. Walt and I could probably talk about it for days. He might not agree with my view that the role of Headquarters is to do exactly what the Regions want and supply ever increasing resources for us to do what needs to be done.

Oh yes, and by the way, to not second-guess any of our decisions.

In all seriousness, Regions are the operational arm of EPA. Sometimes, as in the case of Superfund, we conduct operations directly. In other cases, as in the exercise of corrective action authorities under the Resources Conservation and Recovery Act, we work in close partnership with authorized States. In both instances, EPA Regional offices are responsible for translating statutory mandates and Agency policies into tangible environmental results—cleaner air, purer water, better protected land.

And in the real world, unlike my fantasy world where Headquarters supplies all the resources we need, we face significant and increasing pressures to ensure that while our site cleanups are effective, they are also cost effective.

Cost effective cleanups are especially important in a world where our ability to detect and monitor contamination with a high degree of precision has increased faster than our ability to understand just what these contamination levels may mean for public health and environmental protection.

Phytoremediation offers four advantages in this kind of world.

First, it can be very cost effective. In appropriate cases, phytoremediation remedies offer the possibility of cleanup that operate over time at a fraction of the capital and O&M cost of more traditionally engineered remedies. This frees up scarce resources to be more widely available to address other important environmental and social problems.

Second, and building upon the principle of lower operation and maintenance costs, phytoremediation offers the prospect of being able to use relatively passive remedies, which require little intervention over time, but which nevertheless offer the prospect of faster and more certain environmental results than relying solely on natural attenuation. This appears to be especially promising in dealing with groundwater plumes of persistent organic pollutants.

Third, properly designed phytoremediation remedies can have collateral benefits, for example, by contributing to the restoration of ecosystems which have been damaged by activities such as large scale surface mining where no other sorts of remedies are technically or economically feasible. These ecosystem restoration benefits can be considerable, contributing to restored habitat for threatened species or simply enhancing the habitat value of particular properties. Using the phytoremediation value of forested or wetlands areas can have positive environmental benefits beyond simply cleaning up the site.

Fourth, used in conjunction with more traditional remedies, phytoremediation can have the benefit of a safety net, performing a polishing function and providing extra reassurance that even very low residual levels of contaminants of concern will be safely treated and removed from the groundwater column.

We in Region 4 feel that we have been exploring these benefits of phytoremediation pretty aggressively. We are fortunate here in the Southeast to live in a part of the country where the climate supports an extraordinary variety of plant life, and where there are many opportunities to try different phytoremediation. You'll be hearing about some of our efforts in the course of this conference—for example, the presentation by Shea Jones on the leachate control project at the LCP Chemicals site in Brunswick, Georgia. Others of you who were able to go on the field trip to the Savannah River Site in Aiken, South Carolina were, I hope, be able to see how we are working with our Department of Energy partners to use phytoremediation at this unique site.

By Felicia's count, we have eight full scale phytoremediation projects underway in Region 4, and five more pilot studies underway. They range all the way from the cleanup of a former coal gas manufacturing plant in Charlotte, North Carolina to projects to remove organics from soil and ground water at Cape Canaveral.

This is a sign of our commitment in this Region to explore the potential benefits of phytoremediation in producing cost effective environmental cleanups in the Southeast.

Yet we also know that we still have a lot to learn. That's why we are so pleased to be able to help in hosting this conference. We hope to learn from all of you, in the many stimulating sessions you have planned, and in all the sidebar conversations which can be as rewarding as the presentations themselves.

So thank you again for coming to be together here in Atlanta. For those of you coming from out of town, I hope you will have a chance to spend some time discovering our city, especially with the weather as nice as it is today, and that you will find your time here to be both personally and professionally rewarding. Please accept the best wishes of all of us in Region 4, and let us know if there is anything we can do to assist you during your stay.

Thank you, and best wishes for a successful conference!