The Horinko Group’s Fifth Annual Summit

Transforming America’s Contaminated Lands – A Vision for Our Nation’s Waste Program

November 7, 2013
Washington, DC

The Horinko Group’s Fifth Annual Summit convened thought leaders in the fields of environmental cleanup, land revitalization, and sustainable materials management. Participants examined how EPA and those interested in its policies could sharpen the focus on opportunities to “do more with less” through public-private collaboration to advance environmentally responsible stewardship.

Following opening and keynote remarks, two panels, comprised of both public and private sector experts, inspired a lively, informed dialogue on the future of our nation’s waste program. The first panel recognized the significant advancements and opportunities presented by life cycle-based materials management and efforts to further advance EPA’s Sustainable Materials Management initiative. The second panel focused on the future of cleanup and revitalization and emphasized the critical need for leveraging new ideas in the face of resource constraints and insufficiency in the capacity of tribes and local communities to deal with the challenges that contaminated sites pose.

OPENING REMARKS: The Challenge Ahead

Marianne Horinko, President of The Horinko Group and Former U.S. EPA Acting Administrator, commenced the Summit with introductory remarks.

Ms. Horinko expressed her sincere gratitude to all panelists and participants and provided a brief background on how this year’s Summit came together. EPA’s Office of Solid Waste & Emergency Response has always been a collegial office in which the current Assistant Administrator generally reaches out to the former Assistant Administrators (AA’s) for
their insights and advice. Earlier this year, Mathy Stanislaus convened the former AA’s in an effort to obtain some “good thinking” about the future of OSWER’s programs. Stemming from that meeting came the idea to convene a collaborative discussion among seasoned peers, and The Horinko Group offered to leverage its annual Summit as a means to convene the group. Ms. Horinko proceeded to give special thanks to the former AA’s for their contributions to convene this group – Elliott Laws, Tim Fields, Susan Bodine, Don Clay, and Win Porter.

She also introduced a new effort that The Horinko Group has recently undertaken, which includes the development of a Green and Sustainable Remediation (GSR) white paper. The objective of the white paper is to encourage practitioners and policymakers to consider GSR practices in all of their efforts to repurpose and enhance our lands. The white paper is currently under peer review and will be distributed in January 2014.

Ms. Horinko concluded by outlining the agenda and emphasizing that individuals would be speaking from their own experiences and observations. She applauded the leadership and contributions of those involved in the Summit to these issues critical to all of us and introduced the keynote presenter.

**KEYNOTE REMARKS: Agency Priorities**

**Mathy Stanislaus, Assistant Administrator, Office of Solid Waste and Emergency Response (OSWER), U.S. EPA,** introduced the many challenges that face EPA as a result of its limited budgets, especially regarding the RCRA program, and stressed the importance of entering into state, local, and tribal partnerships to achieve a sustainable future. Mr. Stanislaus, reflecting on his time at EPA, noted that the Agency has made significant improvements in their approach to sustainable materials management, but there is still a need to operationalize sustainability.

He praised the expertise and professionalism of the audience and expressed his desire that the Summit be used as a brainstorming session to help EPA better reflect the “on the ground” realities and experiences of the private sector as well as state and local governments as it pertains to their involvement with OSWER’s programs. He emphasized the importance of these relationships to achieving Administrator Gina McCarthy’s themes, which include:

1) Making a visible difference in communities across the nation;
2) Addressing climate change and improving inequality;
3) Taking on toxics and chemical safety;
4) Protecting water and precious limited resources; and,
5) Launching a new era of state, tribal, and local partnership.

Mr. Stanislaus spoke of the need to look at environmental protection in an enterprise way, asking the audience members to consider ways in which OSWER could better its relationship with both the private sector and the states. Specifically, he asked how can EPA “operationalize” the concept of sustainability? Recognizing EPA’s need to foster an even more rigorous treatment of sustainability, he highlighted that EPA has broken down its sustainability efforts in four main areas:

1) Sustainable Products and Purchasing;
2) Green Infrastructure;
3) Energy Efficiency; and,
4) Sustainable Materials Management.

Mr. Stanislaus praised the foundational efforts by former OSWER AA’s and the states relating to Sustainable Materials Management, and he posed several questions related to maximizing environmental value at every step of the manufacturing process, from acquisition and production to fostering re-engineering and re-manufacturing. He acknowledged that EPA’s efforts are guided by the recommendations in the 2009 report entitled, *Sustainable Materials Management: The Road Ahead*, which provides a roadmap identifying a number of sectors and materials that offer the best opportunities for recycling and reuse. EPA is shifting away from individualized projects and towards broader themes with reach such as reuse of electronics, food materials and waste, and the Federal Green Challenge, which attempts to leverage the government’s purchasing power to advance authentic life cycle-based materials management.

A big supporter of the life cycle thinking and assessment approach, he raised for discussion the possibility of a rigorous life cycle assessment to inform public policy making. While OSWER looks to promote the incorporation of life cycle assessment into business decisions, many conversations with business leaders have revealed that companies are not reaping the market benefits for their hard work incorporating life cycle assessment approaches into their business decisions. Mr. Stanislaus announced a new effort by EPA’s Office of Chemical Safety & Pollution Prevention and its upcoming release of guidance on green products that will examine the specific considerations that should go into a legitimate claim for green product purchasing. He then asked the audience to consider how these efforts might be expanded to the larger realm of
materials management, in particular the manufacturing and post-manufacturing realm.

Furthermore, he cited a number of area-wide plans as being part of the Obama Administration’s manufacturing efforts and EPA’s involvement with the Administration’s Investing in Manufacturing Communities Partnership. He recognized EPA’s role to promote the expansion of efficient and sustainable practices in manufacturing by specifically working with states to enhance flexibility, streamline permit processes, and remove impediments such as local land use changes and approvals, in an effort to foster the expansion of our country’s manufacturing base.

Mr. Stanislaus turned to the budgetary challenges faced by the RCRA program. Office of Management and Budget encouraged EPA to look at its budget from an outcome-based perspective and consider ways to better demonstrate the positive economic outcomes generated by the RCRA program. EPA is engaging states to find better ways to showcase the more granular economic data and benefits from its investments in the RCRA program.

Next, he acknowledged the large body of cleanup expertise of the Superfund program and stressed the importance of broadcasting the many lessons learned. Success of the program can be seen through advanced cleanup methods and technologies, rising property values, and revitalized local economies. That said, EPA still needs to focus on advancing the linkage between Superfund cleanup and redevelopment, demonstrating the program’s impactful outcomes. He also asked the audience to envision where the Superfund program might be in five or ten years and what strategies might strengthen that linkage.

He also shared that on December 20, 2013, EPA will close its feedback period on a draft Groundwater Remedy Completion Strategy that aims to provide guidance to site remediation teams to enable better decision-making to effectively complete groundwater remedies as part of Superfund cleanups. The plan embarks on an optimization approach, which aims to help site teams direct resources towards the information needed to effectively move a site to completion, while protecting human health and the environment. It also takes into account the many limitations inherent with groundwater cleanups that result in delayed outcomes, including obsolete work being done on site. Mr. Stanislaus approached the audience for any ideas on streamlining the program’s approach, including ways to improve the consistency of its strategic application.
Mr. Stanislaus concluded by describing OSWER’s role in the Obama Administration’s efforts to control climate adaptation. He noted that many states are looking to build up adaptation and resilience in the wake of recent natural disasters such as Hurricane Sandy, and that they are seeking EPA grants to do so. He further described efforts within the Underground Storage Tank, Brownfields, and Superfund programs to consider and develop adaptive strategies for increased intensity and frequency of natural disasters and emergency events. Pressure has been put on OSWER to “change the way they look at RCRA permitting facilities, Superfund sites” as a result of the extremity of these events. He noted that a key challenge is how to integrate adaption between elements of resiliency to a fully “hardened” facility/remedy. Mr. Stanislaus believes that resiliency needs to be built into the RCRA program, Superfund and brownfield projects so as to protect the “walk to work” manufacturing communities, such as those in Southwest Brooklyn, New York.

**PANEL ONE: Sustainable Materials Management – A Life Cycle Perspective**

*Tim Fields (Moderator)*  
Senior Vice President, MDB, Inc. and former AA, OSWER, U.S. EPA

*Sharon Kneiss*  
President and CEO, Environmental Industry Associates

*Sue Briggum*  
Vice President, Federal Public Affairs, Waste Management

*Michael Parr*  
Senior Manager, Federal Government Affairs, DuPont

*Barnes Johnson*  
Director, Office of Resource Conservation & Recovery, OSWER, U.S. EPA

The first panel recognized the significant advancements and opportunities presented by life cycle-based materials management and efforts to advance EPA’s Sustainable Materials Management (SMM) initiative. Mr. Fields kicked off the panel with an overview of the Sustainable Materials Management Coalition, a broad cross-section of stakeholders including industry, academia, non-governmental organizations, local government and community leadership. The Coalition’s focus is to address key issues and opportunities with SMM and make recommendations to EPA, the
private sector, and communities. In June 2012, the Coalition released a report entitled, *Sustainable Materials Management: A New Materials Hierarchy, Solutions to Barriers, and Recommendations for a Path Forward*, and currently is producing a report on life cycle thinking, which will include policy recommendations on how to incorporate life cycle thinking into environmental decision-making.

Ms. Kneiss told the story of waste management as an “industry-in-transition.” Once an industry of waste handling has now transitioned towards an industry of value-extraction from post-consumer waste as a resource. An industry revolutionized by advancements in recycling, diversion, and sorting technologies, has also experienced consumer-driven demand for recycling. This demand has led to new and convenient means for recycling and an “Evolving Ton” of packaging and bottling materials in transition to recyclable goods; the result has been a positive reinforcing feedback loop, sustaining a proliferation in volume. Economies of scale are being achieved through a shift to regional facilities. Innovative developments beyond recycling are being witnessed in areas of waste-to-energy, commercial waste production, and landfill gas extraction-to-production. A new frontier in organics recycling and composting is shaping. However, among these achievements, Mr. Kneiss explained that identifiable challenges remain and flexibility becomes critical during this era of transition. She explained the state-by-state inconsistencies with diversion counting criteria and recommended a need for conformity. She concluded with an observation that regulatory approaches need to be performance-base, not prescriptive and definitional, and should encourage experimentation for new innovative solutions.

Ms. Briggum set the context of her remarks by acknowledging that if you are going to achieve SSM, it has to be sustainable, not only in terms of providing increased environmental stewardship, but also in terms of economic sense. As the price of recycling commodities continues to experience volatility and new lows, maximizing efficiency with value-extraction of the resource is critical. She described challenges presented by a changing waste stream (e.g. paper waste plummets, as plastic rises), but also explained the opportunity that single-stream waste presents for the industry. She stressed the importance of education and outreach to educate the public on what can and cannot be recycled (e.g. all cans should be recycled, but a plastic garden hose will entangle automated sorting machinery). As a society we have talked about the importance of recycling, but we have not talked enough about how to recycle well. Developing partnerships to expand civic engagement and mutual learning is opportune and necessary. Ms. Briggum strongly recommended that EPA take a
leadership role as an educator and leverage its many tools (e.g. guidance, disclosure, use of its website and list serves, and an ability to convene groups) to “get the word out.” She concluded by addressing the budgetary realities at EPA and stressed the need for more public-private partnerships and coalitions such as the SMM Coalition to help EPA advance the opportunities described.

Mr. Parr discussed the use of Life Cycle Thinking (LCT), and the key word being thinking – not necessarily detailed analysis. Comprehensive Life cycle Analysis is a complex, resource intensive practice that cannot be performed without significant resources, where as LCT utilizes elements of the LCA concept in a less complex way and helps you think about decisions in a broader context informed by potential life cycle effects. LCT can highlight non-intuitive conclusions, and is an inherently scalable tool. For example, LCT can inform business decisions and influence decisions regarding product and process planning as well as end of life management to reach more informed conclusions. LCT can consider many facets of a product or process, including raw material selection, sourcing, and transport to manufacturing technologies to finished product transport. It can also be used to inform downstream customers about the product in a more complete way. This application has been seen to influence and improve overall product design. Mr. Parr concluded by highlighting a recent endeavor of the SMM Coalition and the anticipated release of a guidance document, which will help educate broader audiences on ways that community groups, companies, and even individuals can readily apply LCT to their own benefit in evaluating materials management options.

Mr. Johnson called attention to the upward trend in U.S. recycling rates that have grown from single-digits in the 1980’s to an approximate 35% recycling rate today. EPA’s Office of Resource Conservation & Recovery (ORCR) publishes an annual Municipal Solid Waste Characterization Report, which provides the most recent available data on annual U.S. waste generation, recycling, and disposal, as well as the benefits of recycling. The annual report continues to influence policy, and EPA has launched a pilot focused on working closer with states to gather more granular state-level data by creating efficient data-gathering techniques and processes. ORCR is also focused on ways to foster more Life Cycle Thinking and has a team of people working internationally and across the federal family to pull together existing data and analysis in order to make information more readily accessible, but also to prevent duplication. Mr. Johnson then called attention to ORCR’s three key emerging focus areas: 1) Food Waste & Recovery, 2) Electronic Waste, and 3) Federal Family Influence. For each key area, EPA has launched a challenge program to engage partners and
influence leaders and utilize “recognition” to acknowledge and award excellence-in-practice. Each key area has attracted a high level of sector participation, and EPA is pushing the largest U.S. consumer – the federal government and its agencies – to advance improvements and practices that advance sustainable materials management strategies.

**PANEL ONE – FOLLOW-UP DISCUSSION**

**Comment.** The Department of Defenses is undertaking an initiative to inject sustainability into their acquisition process. To give context, this is not related to green procurement of items “off the shelf,” but the large item purchases such as aircrafts with a 30-year life. The sustainability analysis has a two-part process: 1) streamline life cycle assessment 2) life cycle costing – marrying up impact and costs. DoD just finished a very successful pilot project with Boeing and Sikorsky to build a fleet of aircrafts and helicopters, and now has the intention to infuse this sustainability analysis throughout the DoD acquisition process.

**Question.** How many people here have a phone that’s more than two years old? I’d like to recommend some sort of program that works with the manufacturers to reduce hardware upgrades. There should be a way for industry to think ahead and not persuade us to get new hardware every time there is a major application upgrade.

**Comments.** This is a profound issue. The readily available option is to send our devices to a certified recycling facility. Certified recyclers focus on reuse because it is a high value application, so they look closely at the ability to reuse and remarket. There’s also focus on the advancement for design-for-recycling with our products.

**Question.** How much do you think about the extraordinary events? People in this room have dealt with Katrina, 9/11, the Gulf Oil Spill, etc. What happens when your 100-year facility or landfill gets flooded, and how much do you think about the life cycle being defined not by the ordinary course of events, but by the extraordinary?

**Comments.** We are trying to think comprehensively about everything from our own facilities, to our materials sourcing capabilities, to what products the market needs to build resilience. We are thinking not only about our operations, but also about what the marketplace demands.
We want to preserve all of our assets and serve as an asset when needed. We want to make sure our facilities are prepared, and are using automated tools to take a look at where our facilities and operations are in order to be strategically located, while repositioning those more vulnerable facilities. Also, EPA’s on-scene coordinators and OSWER’s emergency responders have been critical resources for communities during these emergencies. Voluntary efforts by business and NGOs such as the Carbon Disclosure Project have also been instrumental because they instill risk management thinking throughout a company as related to climate adaption.

**Comment.** One participant informed the group of the National Strategy for Electronics Stewardship. This effort goes beyond OSWER’s portfolio and involves cross-Agency participation and includes advancements with green chemistry, procurement strategy, and design-for-recycle.

**Question.** When you do a Life Cycle Analysis, you have several options to choose from and several metrics in play. How do you communicate that to a consumer, when you have different metrics and different results, and when you have different options with different weight? What do you do with that information?

**Comments.** LCA is a decision-making tool about what product I am going to make and offer to the consumer. We think about what values are the most relevant to the consumer. In an application, what would be valued more by the consumer? Greenhouse gas reduction? This is can be more of marketing than a LCA question.

The most important thing to consider when doing a LCA is to ask yourself, what am I trying to figure out? Having a very clear scope of what it is that you are trying to accomplish is critical. That sets the boundaries for how many factors you are going to examine and within what parameters. The more remote analysis you have, the more complex the LCA. Scoping and scaling your analysis around what exactly you are trying to figure out is the most important aspect of LCA.

**Question.** How often do you do a full LCA versus life cycle thinking on projects?

**Comments.** We incorporate life cycle thinking pretty much all the time. However, we include a full publishable end-to-end LCA fewer than five times a year across our global operations. The decision on
whether or not to do a full LCA comes down to looking at how big a decision we are trying to make. We use LCA because it helps us make better and more cost effective business decisions. It helps prevent any “oops” that we did not anticipate.

As it pertains to specific products, completing LCA is not just important to know what the environmental impacts will be, but also to identify the most effective ways to advertise the product. Many companies along the value-chain want documentation about what can and cannot be recycled, what was the product’s energy-water footprint, what went to the landfill, etc – we need LCA to quantify the possible upstream benefits of the products we sell.

**Question.** In defining sustainability, how do we get individuals to think about the deductive problem solving inherent in LCA? At the community level, how do we break this down and simplify it so people can deploy life cycle thinking when they are in front of a soda machine, for example?

**Comments.** The power of the “simple examples” is extremely beneficial. Using simple, clear, and meaningful examples can get the conversation started and into context. SMM Coalition will be releasing their *Life Cycle Thinking Guidance* that will contain specific examples and suggestions for LCT application. However, even informal, simple life cycle thinking is a struggle for EPA, as every decision has to consider the cross-Agency impacts. This type of thinking involves pulling folks together and promoting this cross-programmatic kind of thinking both at EPA and on the individual level.

**Question.** How do we make LCA a more manageable effort for the private sector so that, for example, they can perform LCA on all of the chemicals in the linear supply chain? How do you gather and secure data to do the LCA? This has been a huge concern on the manufacturing side.

**Comments.** As the government seeks access to environmental or other information that may include Intellectual Property (IP), we become concerned about threats of industrial espionage committed by hacking into U.S. government data systems, which is a real threat. While EPA has done a great job of managing Confidential Business Information, we worry not just about what they might release but also what might be stolen from them. For example, we wrangled for over a year and a half on how EPA should treat CBI related to emissions reporting for certain kinds of chemical productions
because we were concerned that some of the information EPA initially wanted risked exposing our IP. The main issue for EPA is how to protect the economic interests of the companies when holding significant amounts of information.

**Comment.** After all we have experienced with Katrina, Sandy, or the epic flooding event in Denver, it is recommended to engage city officials, who worked through these disasters first-hand, and develop the best management practices that can guide the protection of other vulnerable areas.

**Question.** What kinds of opportunities do you see going forward to partner with communities and local governments on some of these issues?

**Comments.** One key opportunity is with education at the local level. In the context of recycling, educating the public directly results in high efficient recovery rates and in turn lower cost of service. Engaging localities with effective educational resources and messaging is important.

As it relates to post-disaster events, our experience shows that communities are eager to engage first-hand in the waste management (e.g. disaster debris) and recovery, and they quickly become overwhelmed and in search of advice, capacity, and responsible and intelligent methods to efficiently manage the cleanup and recovery. EPA released guidance for proactively planning and managing post-disaster debris recovery.

There is an opportunity for Life Cycle Thinking to influence more cost-effective approaches to the challenge of upfront infrastructure expenditures at the local governing level. However, capacity challenges and lack of technical expertise at the local-level is an area for much needed further assistance.

**Question.** How do we operationalize sustainable materials management?

**Comments.** EPA is losing resources, and it cannot possibly meet the demand for the complex, technical, and intricate work needed without establishing partners and collaborations with broad-based stakeholder groups – partnerships in which information sharing creates mutual value. So the question is, how do we leverage more resources and better prioritize in order to educate and operationalize
SMM into our organizations? Federal advisory committees might be worth exploring.

From a business enterprise perspective, we do it through infrastructure. We start with corporate level goals, which are very transparent to create accountability. Furthermore, we have a well-structured product stewardship process, which incorporates LCA from product development to commercialization. Additionally, we have tools, resources, and expertise – such as energy advisors, LCA experts and a Chief Sustainability Officer – all of which provide routine opportunities to monitor the progress of the company’s sustainability goals.

PANEL TWO: Future of Clean-Up & Revitalization – Key Leveraging Ideas

Steve Herman (Moderator)
Principal, Beveridge & Diamond and former AA, OECA, U.S. EPA

Vernice Miller-Travis
Senior Associate, Skeo Solutions

Buddy Bealer
Government Outreach Lead, Sustainable Remediation Forum

David Lloyd
Director, Office of Brownfields and Land Revitalization, OSWER, U.S. EPA

Jutta Schneider
Program Manager, Office of Remediation Programs, Virginia Department of Environmental Quality

The second panel focused on the future of cleanup and revitalization and emphasized the critical need for leveraging new ideas in the face of resource constraints and capacity challenges. Mr. Herman kicked off the panel describing the strength that is gained from convening varying perspectives of experts working on similar issues from differing angles – an opportunity to develop synergies in thinking, but also to cross-challenge and test assumptions. He set the stage by explaining the need to leverage available resources and expertise across the public and private arena, while also acknowledging one certainty – the government cannot take on these challenges alone.
Ms. Miller-Travis, drawing on her 20-year working relationship with OSWER, explained the transformative efforts witnessed in the early ‘90s that integrated environmental justice into the depths of OSWER. In 1994, former OSWER AA Elliott Laws issued a cross-Agency memo that set the framework for the level of integration that the Clinton Administration expected of EPA. Consequently, it situated OSWER as the lead program office to marshal an environmental justice agenda across the Agency. Another critical aspect was the environmental justice coordinators positioned in every OSWER program office and division, which were instrumental with fostering depth in integration. She also highlighted OSWER’s launch of the Brownfields Redevelopment Initiative and the community impact through its Brownfields minority workforce-training program. EPA truly set the bar for job training within the waste remediation arena, while advancing local involvement and understanding in the science and technical trade of site remediation and creating a foundation of economic opportunity in the lives of many minorities. Furthermore, 1996 marked the first ever Brownfields Conference, which pulled together individual project-by-project conversations and created a national dialogue with critical mass – future conferences would attract an upward of 7,000 participants. Ms. Miller-Travis also recognized the launch of OSWER’s Superfund Reuse Initiative, which delivered federal resources to state and local governments to not only characterize and cleanup a site, but also to establish how its reuse can fit into a community’s overall thinking of revitalization. EPA tools and resources such as TAG grants, TAB centers, and other technical assistance support have all contributed to the transformation of communities affected by contaminated sites, and she stressed the importance of “telling OSWER’s story.”

Mr. Bealer explained that one challenge with sustainability is as basic as our discretionary “choice” – we face several trade-offs and the majority of the time the answer is, “it depends.” There is a direct parallel between applying Life Cycle Thinking to a product as there is to site remediation – all inputs and outputs must be accounted for to deliver the highest value in decision-making. Mr. Bealer described his collaborative work with the Interstate Technology & Regulatory Council while developing its guidance document, Green and Sustainable Remediation: A Practical Framework. Early on, the group quickly learned that listing technologies as either sustainable or not was a naive approach due to the “it depends” factor – technologies should not be labeled sustainable until broader consideration is given to the specific situation – it is the framework applied to the decision-making process that leads to sustainable outcomes or not. The Sustainable Remediation Forum (SURF) has convened interested members
around the question, “what’s the best way to remediate a site,” and seeks to identify which approach to the given scenario is sustainable, or not. Mr. Bealer quickly explained the difference between green remediation and sustainable remediation, acknowledging that GR focuses clearly on the environmental aspects of a project, whereas SR considers the environmental, social, and economical aspects – applying a more holistic, Life Cycle Thinking approach. It is the theory of putting “everything on the table” for stakeholder evaluation, followed by the application of a framework for managing the “everything” in an effort to decipher the best approach. SURF, ITRC, and ASTM have all developed frameworks; however, SURF has chosen the more detailed ITRC framework as its application.1

Mr. Lloyd acknowledged two key aspects of the Brownfields Program: 1) the liability relief critical from a real estate demand perspective; and, 2) resources go directly to the communities without any state filters or allocations. Further, he acknowledged two key challenges facing the program that EPA will address: 1) resource constraints; and 2) lack of capacity within communities. Leveraging resources has been imperative, and third party data shows an ~$18 economic impact for every $1 of federal funding invested in brownfields. Tracking capacity and resource challenges has been centric to the Brownfields Area-Wide Planning Program, which conducts research, technical assistance, and training that will result in an area-wide plan and implementation strategy for key brownfield sites to promote regional revitalization. An initial round of 23 pilot communities have shown great success. A follow-up report to be released soon will capture each community’s accomplishments. EPA is focusing on further ways to develop data and metrics to track the environmental and economic outcomes as a planning tool for brownfields redevelopment (e.g. the inherent efficiency gained when using existing infrastructure). Research has shown a ~5-12% increase in property values within a mile surrounding a brownfield redevelopment. Another focus area is creating greater administrative and regulatory flexibility with existing RCRA projects to foster greater development opportunities that would allow properties to be parceled out from an RCRA-permitted site – for example, using RCRA prospective purchaser agreements for a buyer to confidently come to the table. Lastly, Mr. Lloyd stressed that additional tools to build community capacity is a continued focus for the Agency.

Ms. Schneider’s remarks focused on the theme of “doing more with less” as she described the LEAN methodology, a method of systematic process

1 ITRC Framework training webinar – http://cluin.org/live/archive/default.cfm?display=all&group=itrc#
evaluation that started with industry and has become increasingly popular with states and EPA. LEAN allows an organization to identify process inefficiencies by looking at causes of backlogs, errors in documents, and duplication of work, while highlighting unnecessary process steps. In February of 2013, OSWER convened a weeklong stakeholder meeting on LEAN, focused on looming deadlines under EPA’s 2020 Vision and frustration with correction action steps viewed as lengthy and over complicated in their application. Using a process called Value Stream Mapping, the group examined every step of a RCRA facility investigation to identify pain-points, obstacles, and inefficiencies. Several items were identified, including: 1) No upfront agreement on objectives with respect to site cleanup; 2) Varying perspectives around uncertain tolerance (e.g. data sufficiency; risk tolerance); and, 3) Lack of accountability to achieve a quality product. Ms. Schneider noted that all obstacles identified were also applicable to any component of the RCRA process, beyond facility investigation. Furthermore, the group discovered that insufficient information and ineffective transfer of information has hindered the ability to make decisions and to build trust between parties (i.e. regulated communities, states, and EPA). Lastly, coming out of the weeklong sessions, the group came up with the following recommendations: 1) To exchange information and standard objections upfront; 2) To address concerns upfront; 3) To discuss criteria and expectations upfront; and, 4) To build trust and formalize agreements, bringing all issues of frequent disagreement or miscommunication to the table to be resolved before work gets under way. It was noted that EPA Regions 3 and 7 and the state of Missouri have all now committed to LEAN pilots, which will commence in the near future. Virginia is continuing its implementation of the LEAN lessons learned across all project sites.

PANEL TWO – FOLLOW-UP DISCUSSION

Question. What about other opportunities for leveraging resources, such as third-party reviews? Perhaps five-year reviews of Superfund remedies would be a source of application. Many states would like more flexibility to use site assessment money for leveraging purposes. At the same time, more attention is needed for uses such as long-term remedial action, remedy optimization, vapor intrusion, and contaminated sediments.

Comments. States have the technical ability and infrastructure to do site assessments, and states have been vocal in respect to their desire to do these site assessments themselves, as many believe states can do a better job than EPA contractors.
When we pick remedial solutions, each solution will have its consequences. Some consequences are temporal, relating to the right time frame to remediate while other consequences are spatial. For example, are we dealing with global consequences such as those associated with CO₂ emissions? There are topical consequences such as issues involving energy use or water quality. These consequences are always on the table and at the same time, and the choices that we make affect them differently. As such, the question must be, are we willing to accept those consequences from the decisions we make? Risk can never be eliminated; therefore, it’s always about minimizing risk. In certain circumstances risk can be minimized if we remediate over a longer duration, while other risks can be minimized if we remediate over a shorter time frame. All of these issues must be on the table and vetted in a third-party or a five-year review. No matter where you’re at in your analysis, stop and ask, “Where are we?” from a sustainability perspective, and “Where are we going?”

One approach to framing these questions is: what are you trying to leverage at the local level with federal dollars? The Brownfields program has been successful at creating a tertiary real estate market in former brownfield spaces; however, it has been less successful in creating economic value in distressed places. EPA should frame what they are trying to achieve and then evaluate tools and partnership opportunities to leverage those federal dollars.

When thinking about five-year reviews and site assessments, it is important to note that for permanent facilities, there’s a requirement to evaluate the effectiveness of the remedy. There is an interest on the side of industry in the site cleanup arena; however, there is still not enough incentive to put in the extra investment to bring about final closure.

**Question.** Is there something you would like to see become of the Brownfields program?

**Comments.** The Brownfields program accomplished what it was originally set out to do. At this stage in the game, we need new, multi-cultural approaches to thinking about sites situated in places that are not “screaming” they’re ready for redevelopment. The challenge is to move on with the success of the program and figure out how to drive the redevelopment of those sites in the “middle of nowhere,” which has a significantly lower value than other desired
sites (e.g. waterfront property). It will be important for the program to figure out how to “hit the sweet spot” of market potential. For example, smaller sites in distressed areas could be pooled together into larger frameworks for redevelopment. The program will now require next-generational thinking.

The program critically needs the IRS Code Section 198 tax incentive reinstated to give developers assurance that they can expense (timely) the clean up costs incurred. Research conducted on NYC projects is showing how effective this incentive can be in spurring cleanups, promoting redevelopment, and creating jobs.

**Question.** Rural America has been vocal about the very concerns we’ve addressed today. Is the best way to help rural communities by providing more technical assistance to help with their capacity to carry out revitalization projects?

**Comments.** Flexibility and capacity is key. Presently, administrative burdens and inflexible grants significantly hinder the ability of these communities to progress with cleanup and revitalization. Allowing state and local governments to use federal grants for reuse planning, site investigation, and cleanup, would especially bring about efficiency in rural areas.

**CLOSING REMARKS: What We’ve Heard – Doing More with Less through Collaboration**

**Marianne Horinko** concluded the Summit with takeaways from the day’s discussions –

- It is important to recognize how far we have come. We were once dealing with disasters like Love Canal and Valley of the Drums. Nowadays, we are looking through a new lens, seeing waste streams as a valuable resource. We have been able to put some of the hardest cleanups behind us, while accounting for other sites on the National Priority List and focusing on remedial and best management strategies for those sites. Further, we cannot lose sight of effectively reaching out and working alongside communities to better understand their vision and desire for the economic redevelopment of these properties.

- Whether it is disaster planning, safer chemicals, design for recycling, or life cycle thinking, we are using a different suite of tools today. In
the past, we predominately relied upon government regulation, guidance, and enforcement, but in today’s discussion, we heard several times about the benefits of collaborative working groups and public-private partnerships, private sector guidance and consumer-driven market forces, and flexibility for optimum innovation, to bear desired outcomes for the betterment of our health and the environment.

- From our discussion today, we heard several expressions of frustration that we are not effectively “telling the story.” What was successful in the early years of these programs was an emphasis on outreach, education, recognition (e.g. by way of challenge programs, product stewardship initiatives), and telling the story to communities, local leaders, congressional delegations, and media outlets. Storytelling will be – and always has been – critical.

- It is essential to create “safe places” to convene like-minded individuals with exceptional expertise, both public and private sector, and passion for the environmental challenges and opportunities presented in front of us. From the outset, it has been our goal to create these communities of trusted collaboration and foster an atmosphere for constructive, innovative thinking that allow others to reach across the aisle and ideological divide to get this done.

Finally, Ms. Horinko extended her gratitude to the panelists and the audience members for their participation in the Summit, and expressed her faith in the energy, knowledge, and focus of the group, and the belief that the group and the wider community has the willingness and desire to bring about positive change regardless of Administration.
ATTACHMENT I: FINAL ATTENDEE LIST

Charlie Bartsch  
Senior Program Advisor, U.S. EPA

Buddy Bealer  
Government Outreach Lead, Sustainable Remediation Forum

Kelly Bishop  
Senior Technical Consultant, HSW Engineering

Tawny Bridgeford  
Associate General Council, National Mining Association

Sue Briggum  
VP, Federal Public Affairs, Waste Management

Ken Brown  
Executive Director, NALGEP

Kristen Carney  
Assistant General Counsel, Xcel Energy

Patricia Casano  
Counsel, Government Affairs, General Electric Company

Cheryl Coleman  
Director, Resource Conservation & Sustainability Division, U.S. EPA

Paul Connor  
Deputy Director, Environmental Services Administration, DC Department of the Environment

John Cruden  
President, Environmental Law Institute

David Donovan  
Manager, Regulatory Policy, Xcel Energy

David Ellis  
Independent Consultant

Lisa Feldt  
Senior Advisor, U.S. EPA

Brent Fewell  
SVP, EH&S, United Water

Tim Fields  
SVP, MDB, Inc

Dennis Fitzgibbons  
Environmental Consultant

Anne Germain  
Waste & Recycling Director, Environmental Industry Associations

Alfredo Gomez  
Director, Natural Resources & the Environment, U.S. GAO

Mark Gorman  
Policy Analyst, The Northeast-Midwest Institute

Matt Hale  
Senior Advisor, MDB, Inc
Mark Heaney
VP, Alter Echo

Carol Henry
VP & Principal Hydrologist, HSW Engineering

Steven Herman
Principal, Beveridge & Diamond

Barry Hersh
Clinical Associate Professor and Chair, MS in Real Estate Development Program
New York University

Marianne Horinko
President, The Horinko Group

Barnes Johnson
Acting Director, Office of Resource Conservation & Recovery, U.S. EPA

Karl Karg
Attorney, Latham & Watkins LLP

Lloyd Kirk
Environmental Programs Manager, Brownfields Section, Oklahoma Department of Environmental Quality

Sharon Kneiss
President & CEO, Environmental Industry Associations

David Lloyd
Director, Office of Brownfields & Land Revitalization, U.S. EPA

Jane Luxton
Partner, Pepper Hamilton LLP

Dr. Jeffrey Marqusee
Chief Scientist, Enterprise Engineering & Environment, Noblis

Duke McCall
Partner, Bingham McCutchen LLP

Patrick McGinnis
Senior Advisor, Water Resources Policy & Sustainable Communities
The Horinko Group

Tracy Mehan
Principal, The Cadmus Group

Vernice Miller-Travis
Senior Associate, Skeo Solutions

Carlos Pachon
Senior Environmental Protection Specialist, U.S. EPA

Michael Parr
Senior Manager, Federal Government Affairs, DuPont

Marcus Peacock
Visiting Scholar, George Washington University
Drew Rak
Sr. Principal Scientist, Noblis

Jerry Roose
Director,
North American Environmental Operations,
Freeport-McMoran Copper & Gold

Suzanne Rudzinski
Retired, U.S. EPA

Jutta Schneider
Program Manager,
Office of Remediation Programs,
Virginia Department of Environmental Quality

Lenny Siegel
Executive Director
Center for Public Environmental Oversight

Cliff Rosenstein
Government Affairs Advisor,
K&L Gates

John Simon
Advisor, Gnarus Advisors LLC

Mathy Stanislaus
Assistant Administrator,
Office of Solid Waste & Emergency Response,
U.S. EPA

Michael Taylor
President, Vita Nuovo

Douglas Van Pelt
Manager, U.S. Water & Waste,
ExxonMobil

Michael Wanta
Operations Manager, Tetra Tech

Anna Willett
Director,
Interstate Technology & Regulatory Council

Paul Yaroschak
Deputy for Chemical & Material Risk Management,
Office of the Deputy Under Secretary of Defense (Installations)
ATTACHMENT II: SUMMIT AGENDA

The Horinko Group’s Fifth Annual Summit

Transforming America’s Contaminated Lands –
A Vision for Our Nation’s Waste Program

November 7, 2013
Washington, DC

As our nation's waste management and cleanup programs mature, we anticipate a transformation of the regulatory landscape. The concurrent emergence of a new economy, available investor capital, and a resurgence of manufacturing in the U.S. are creating a renewed interest in site cleanup and repurposing. Rising property values and the public demand for more sustainable products and practices are driving innovative approaches to the management of wastes, materials, and land use.

This year’s Summit will convene thought leaders in the fields of environmental cleanup, land revitalization, and sustainable materials management. Participants will examine how EPA and those interested in its policies can sharpen the focus on opportunities to “do more with less” through public-private collaboration to advance environmentally responsible stewardship.

Registration

1:00 – 1:30pm

Opening Remarks

1:30 – 1:45pm

The Challenge Ahead
Marianne Horinko
President, The Horinko Group and former Acting Administrator, U.S. EPA

Kick-off Remarks

1:45 – 2:15pm

Agency Priorities
Mathy Stanislaus
Assistant Administrator, Office of Solid Waste & Emergency Response, U.S. EPA
Panel One  
**Sustainable Materials Management (SMM) – A Life Cycle Perspective**

Tim Fields (Moderator)  
Senior Vice President, MDB, Inc. and former AA, OSWER, U.S. EPA

**Industry Trends in SMM**  
Sharon Kneiss, President & CEO, Environmental Industry Associations

**Company Perspective on SMM**  
Sue Briggum, Vice President, Federal Public Affairs, Waste Management

**Application of Life Cycle Analysis in SMM**  
Michael Parr, Senior Manager, Federal Government Affairs, DuPont

**Federal Influence**  
Barnes Johnson, Acting Director, Office of Resource Conservation and Recovery, OSWER, U.S. EPA

**Break**  
3:30 – 3:45pm

Panel Two  
**Future of Clean-Up & Revitalization – Key Leveraging Ideas**

Steven Herman (Moderator)  
Principal, Beveridge & Diamond and former AA, OECA, U.S. EPA

**Community Revitalization**  
Vernice Miller-Travis, Senior Associate, Skeo Solutions

**Green & Sustainable Remediation**  
Buddy Bealer, Government Outreach Lead, Sustainable Remediation Forum

**EPA’s Brownfields Program**  
David Lloyd, Director, Office of Brownfields and Land Revitalization, OSWER, U.S. EPA

**EPA’s LEAN Corrective Action Pilots**  
Jutta Schneider, Program Manager, Office of Remediation Programs, Virginia Department of Environmental Quality

**Closing Remarks**  
5:00 – 5:15pm

**What We’ve Heard – Doing More with Less through Collaboration**  
Marianne Horinko  
President, The Horinko Group and former Acting Administrator, U.S. EPA

**Networking Reception**  
5:15 – 6:30pm