

PROPOSAL

TECHNICAL ADVISORY ASSISTANCE: CABOT/KOPPERS SUPERFUND SITE

Prepared for Protect Gainesville's Citizens

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INTRODUCTION

Protect Gainesville's Citizens (PGC) has been awarded a Technical Assistance Grant (TAG) from the United States Environmental Protection Agency (EPA) in order to obtain the services of technical advisors to assist in improving the Gainesville community's understanding of the Superfund activities at the Cabot/Koppers Site (hereinafter referred to as the Site) and more importantly, to promote the most effective community participation in the remedy selection and implementation at the Site.

At most Superfund sites, a remedial investigation/risk assessment is completed, followed by a feasibility study (FS) that provides the analysis sufficient to select a remedy that is protective of human health and the environment.

The Cabot/Koppers Site is more complex. The Site has been a Superfund site since 1984 which led to an initial record of decision (ROD) in 1990 to address soil and groundwater contamination. Cleanup activities for soil and groundwater occurred in the mid 1990s to include removal of contaminated sediments in the Northeast Lagoon, construction of the trench to intercept contaminated groundwater from the shallow aquifer, and installation and operation of a surficial groundwater pump/treat system. However, removal of contaminated soils on the Koppers property, as required in the 1990 ROD, was delayed when additional investigation identified unknown sources of dense nonaqueous phase liquid (DNAPLs) and dioxin-contaminated soils within the Koppers property. Since then, a number of additional studies, memoranda, groundwater monitoring reports, work plans and data reports have been prepared with the intent of leading to a revised feasibility study that supports the recommended remedies for soil and groundwater. To date, there is no current comprehensive document that provides the complete current data set and cohesive data analysis that has occurred since 1990.

It may be possible for a technical advisor to summarize the FS and proposed plan based on simplifying the executive summaries in these documents; however, this approach may not provide the clarity and understanding of cleanup options the public needs to comment to EPA on the preferred cleanup remedy for the site. Rather, SEA's approach is to initially have meaningful participation by the public during the SEA's review of the FS and supporting documents (e.g., onsite risk assessment, ongoing off-site risk assessment, etc.) and proposed plan, to ensure the public has a transparent understanding of the interrelatedness and completeness of these studies in addressing the core issues of concern to the community.

Pat Cline, the lead technical advisor (TA), has been involved in reviewing several of the past and recent Site documents, with emphasis on the surface soil issues and risk assessment. In addition, she has participated in meetings and discussions with the City/County/GRU technical team related to groundwater and subsurface remedies of the Site. In this capacity, she has played a key role in enabling the local government and city utility to effectively participate in communications with EPA and FDEP as a result of her ability to translate key technical concerns in an understandable format. In addition, as a member of this community, she is committed to supporting the efforts of the PGC and the public to enable effective community involvement that can influence the ultimate cleanup outcome of the Site through the application of her outstanding risk communication skills

OVERALL TIMELINE

Services are being sought for a two-year contract period. This includes participation in the process that will determine the final remedy for the Site over the next several months, followed by oversight related to implementation of the remedy.

The Record of Decision (ROD) is the EPA decision document that will describe the remedy. It is prepared by EPA after consideration of stakeholder input following publication of the proposed cleanup plan. The plan summarizes the alternatives evaluated in the FS, and the documents/data supporting the evaluation and selection of the preferred remedy. The proposed plan is expected within the next month. The standard comment period is 30 days and will be extended to 60 days or possibly longer. Community input is critical during this period since the feedback is not only required by Superfund regulations, but more important, effective public comment can influence the final remedy selection process. A critical time for the community to engage in a meaningful way is during the comment period for the proposed plan.

Therefore, assisting the community in understanding the site conditions/risks, potential cleanup options and the impact on the future use of the site is a priority prior to the issuance of the final ROD; this effort is reflected in Tasks 1-3 of the RFP. Tasks 4 and 5 represent technical advisory activities associated with post ROD decisions with activities focusing on oversight and monitoring of the remediation design to ensure consistency with the ROD, as well as, remedy implementation to verify that the remedial action objectives are met.

PROJECT APPROACH

The overriding goal of this Technical Advisory Team is to provide the community with the information and tools to participate most effectively in the decision process for the Cabot/Koppers cleanup. Therefore, the team is focused on the Superfund issues/decision process and includes the following activities:

- Explaining key technical and regulatory issues
- Providing a guide to regulatory requirements and guidance
- Assisting with effective participation in meetings and comment preparation
- Addressing community questions related to Koppers and Superfund

The focus of these activities is to help the community navigate through the extensive list of existing and upcoming documents/studies available on the Site with the primary goal of identifying and clarifying key technical issues and questions to be raised with EPA that will influence the ultimate cleanup decisions for the Site.

We recognize that given the same information, community members may differ on a plan of action they feel is appropriate. Although opinions may differ among the members, it is more important for us to provide people with the best information and strategy to make their voices heard. This is an active community, and the process benefits with the full participation of individuals who are committed to influencing the final remedy decision.

The ROD is the final decision document. TAG funds cannot be used to challenge or reopen it.

A fact sheet on the ROD will be prepared. A formal presentation will provide an overview of the ROD, and the process to oversee the cleanup (Tasks 4 and 5).

There are Superfund sites with several discrete documents (e.g. RI/FS; proposed plan; ROD; remedial design) where a formal fact sheet and single presentation may be useful. The challenge at this site is that it is not always clear what documents are final, and that a fact sheet may become obsolete soon after it is prepared. Given the evolving nature of the reports and work plans at this site, a flexible approach that most efficiently addresses the issues in a timely manner and updates the community as the decisions/information evolves is recommended through the period until the ROD is finalized.

Because the critical time period for community participation in the Superfund process is through the comment period for the proposed plan, emphasis is placed on efficiently organizing and integrating the information provided in existing documents so the community is provided with the most comprehensive evaluation of the plan and supporting document.

TASKS 1-3 HISTORY, MAJOR ISSUES AND REMEDY DECISION DOCUMENTS

The proposed TAG budget allocates approximately 250 hours for the first 3 tasks which includes: 1) Historical Summary and Timeline, 2) Major Issues, Summaries and Fact Sheets, and 3) Feasibility Study. Together these three tasks provide the foundation for understanding the proposed plan and supporting documents influencing remedy selection, and communicating the final decision.

Review time will be allocated appropriately among these three tasks; however, the information will be presented based on specific issues. Therefore, as an example, the issue of onsite soils will include:

- Issue summary
- Proposed plan recommendation
- Highlights of recent documents on which the plan was based (FS, risk assessments, etc.)
- How this issue was addressed in previous RODs/plans (site history)
- Supporting information on the issue (guidance, state/federal regulations or requirements)
- Current status

In this format, we believe the public will be able to best formulate their opinions on each issue of the proposed plan and effectively participate in dialogue, while addressing the PGC requirement to allocate time among the phases in which the issues were addressed. However, a timeline for the site will be prepared during the initial review so that it will guide overall understanding of the site and process.

To implement this strategy, a process is proposed to effectively review and advise PGC on the site history and remedial options as outlined below.

ORGANIZATION: ADMINISTRATIVE RECORD FILE AND KEY HISTORICAL DOCUMENTS

Acquire all pertinent documentation that serves as the fundamental building blocks that support the selection of a remedy for the Site

- Obtain the administrative index file that will list documents on which the proposed plan will be based (and determine if it is complete and sufficient).
- Identify additional documents that may provide supporting information or understanding of site history.
- Identify key guidance documents that the community may wish to reference when considering their comments

Note:

This task is necessary, but not primary responsibility of the TA and assistance may be sought for this organizational task so that document review time is optimized.

INITIAL DOCUMENT REVIEW AND SUMMARY

The TA will briefly review the documents, beginning with the most recent to clarify the following:

- Basic purpose, contents, status (draft, final, approved) and impact on the proposed plan, if any.
- **Overall site history timeline will be prepared**, and previous decisions and proposed plans
- Ongoing sample collection plans and upcoming documents

The goal of this activity is to clarify the site history, major issues and their current status, critical documents, ongoing investigations, and the process for influencing remedy selection. A meeting with the PGC board is proposed at this initial stage for the TA to summarize the information acquired during the document review, and work to refine the approach to most effectively engage in discussions of the proposed plan. During this meeting, priorities will be established. **Not all issues are equally important or complex.** The TA will make recommendations and discuss with the PGC board specific details on the level of effort and possible strategies to best address different issues within the time and budget constraints. The role of the TA and the approach to organizing and communicating information will be clarified in this discussion.

ISSUE SUMMARIES

Work with PGC to have the project historical timeline and overview of key issues summarized and accessible on their website. It is recommended that information be organized on the topics that reflect the community's primary concerns (air, onsite soil, offsite investigations/soils, sediment, groundwater, risk assessment, remedial technologies, site reuse, relocations, etc.) rather than a specific document. As described previously, issue summaries will include an overview, the proposed plan recommendation, basis for the decision, relevant guidance/reports, and current status.

Formal fact sheets and reports may be quickly obsolete. Success may be better judged by effectiveness of communication, real time updates, and strategic planning/ comment preparation until issues are finalized (e.g. ROD, Final Remedy Report).

The use of the website is recommended because of the dynamic nature of the information. There will be ongoing plans for sampling offsite soils and data reports, additional sediment studies, etc. It is likely that the PGC will want updates on these, including discussions of the credibility of the results as reflected by the quality assurance/quality control (QA/QC) of the data as well as an interpretation of results.

Note:

I discussed the repository with staff at the Alachua County Library, and inquired about a room. They will put the documents on a cart that could be taken and reviewed in different areas. Individuals can reserve a small room – but they will not set aside a room. We could have individuals reserve a room once a week for a working review session with a small group. I will attend once a week – proposing from 4-8 PM hopefully with a few people to help and where I can help them understand the documents, what to look for, etc.. I will request that the cart contain a three ring binder with the current issue summaries that can be updated by anyone in PGC so that issue summaries can be in hard copy at the repository in addition to the website.

PRESENTATIONS AND COMMUNITY INTERACTIONS

The TA will attend community involvement meetings, where more detailed information can be presented on specific issues, questions can be addressed, or additional issues raised. One objective of these meetings would be to have community members:

- identify questions they may wish to raise at the public meeting on that issue
- develop comments to be provided in writing to EPA related to how the issue is addressed in the proposed plan
- develop recommendations to EPA for how they would like the issue addressed in the final remedy

This process will allow an incremental focus on strategies to influence the proposed plan, as opposed to a separate report addressing all issues simultaneously.

Over the next several months, the following approaches are also recommended to ensure the best interaction with the community and effective evaluation of technical issues.

Availability during Reviews. During the 30-60 day comment period for the proposed plan, the TA will allocate approximately 4 hours each week to review documents at PGC's central meeting location, Wild Iris Book Store (if this is a preference for the community) or at the Alachua County Library. Dr. Cline will be accessible for questions by individuals and active community member participation will be sought to provide assistance particularly for

Accessibility and Roles for the TA

Dr. Cline’s contact information will be provided – and will be the primary point of contact for any questions/requests.

PGC needs to assist in helping the community understand the role of the technical advisor and the overall schedule for addressing issues in an organized fashion.

Questions should be organized and prioritized around issues – particularly those focused on the Superfund process and decisions.

It takes time to organize and review information. Rapid responses to questions should not be the criteria. It is important to be systematic and thorough and meet the deadlines for effective participation.

Questions should not be about litigation issues but focused on influencing the best remedy for the site.

Some assistance may be provided on questions unrelated to the Superfund decision process – but PGC needs to be aware that time is limited and priorities may need to be established.

tasks outside the responsibility of the TA (e.g. checking documents related to the Administrative record) or extend the depth and format of support that can be provided by the team.

Dialogue with the City/County technical team. If possible, we recommend some ongoing dialogue with the City/County on technical issues, as well as their participation in some of the community meetings. Their technical team will likely address numerous technical details which only broadens the number of reviewers, enhances PGS’s knowledge – base and may lead to a more comprehensive and effective basis for the development of community input and achieving the best outcome for the final remedy. The PGC will also be more aware of efforts being taken on behalf of the community by this team.

Public Meetings. In addition to supporting the community during the public meeting, Dr. Cline will also attend selected commission meetings or other public forums that will include discussions of the Koppers site. Sometimes the language used is vague and open to interpretation. To the extent this impacts the communities understanding of the plan and possible impacts on the remedy selection, feedback will be provided to PGC following commission meeting attendance.

EPA Presentations. We may also recommend that the community request EPA to participate in additional public workshops to explain some aspects of the documents that they have developed (e.g. risk assessment) or their policies (e.g. land use or relocation) consistent with guidance and the community involvement plan. This process would help make the documents/decision process more transparent and allow more effective participation beyond a single public meeting to discuss the proposed plan.

DELIVERABLES FOR TASKS 1-3

The key written deliverables during the proposed comment period will include a Site history timeline and summary of major issues provided to PGC to be included on the PGC website. (These may also be in an updatable form at the library).

Presentations will typically be interactive and less formal – power point presentations and/or handouts will be used when topics are particularly complex.

The final deliverables for Tasks 1-3 will include a fact sheet and a more formal presentation based on a review of the ROD; and a summary of responses to the community comments on the proposed plan. This fact sheet will be sent to the library to be included in the repository.

The job of the technical advisor is to provide information. There does not need to be consensus among community members. Individuals or groups may choose to submit different comments or recommendations from others. To the extent possible, assistance may be provided in identifying guidance/regulations or technical information that may help to strengthen their position.

TASK 4 AND 5 POST ROD PHASE: REMEDIAL DESIGN AND REMEDIAL ACTION PHASES

For this proposal, the basic assumptions as outlined in the RFP are used to define the role of the TA during the remedial design and remedial action task.

- The TA's role during the remedial design (RD) phase is to verify that the design is consistent with the requirements of the ROD and to provide oversight on the progress of remedy implementation. In addition to Dr. Steinberg, a professional engineer (P.E.) with Water and Air Research, who will be a lead on the engineering review/implementation oversight, Dr. Cline will seek ongoing contact with the community as additional issues may arise.
- As defined by the scope, the final task (Remedial Action) is the review of the final inspection report, and development of a summary of their findings.

Although the Post ROD activities appear to be straightforward, the actual process is likely to be more complex. For example, there will be separate work plans and implementation/remedy reviews for the sediments, interim measures (phasing of the onsite remedial action) and offsite remedy implementation. Ongoing dialogue with the PGC will be needed to prioritize and streamline the role of the TA to provide the critical support needed during these phases within the proposed budget.

PROJECT MANAGEMENT

As the lead TA, Dr. Cline will coordinate and seek input from team members as needed to meet project objectives, schedule, and budget. Due to Dr. Cline's tenure in the environmental arena both in academia and professionally in environmental consulting, she has developed strong affiliations with technical experts in the areas of environmental engineering, hydrogeology, environmental justice, and toxicology. As the lead TA and project manager for this effort, Dr. Cline will utilize experts on the team to assist in key technical areas to support defensible inquiries to EPA regarding cleanup alternatives. As important milestones must be met with respect to reviewing documents that support the remedial approach to the site, Dr. Cline will maintain routine contact with the PGC board of directors to inform them of progress, schedule, and budgets and submit a monthly project summary and invoice.

The depth and breadth of support will be limited to some extent by the budget and schedule. Dr. Cline will offer in-kind services to help supplement this effort, but may also seek support from community members as new issues arise and priorities are established and refined that cannot be fully clarified at this point in the project.

PROJECT TEAM

Dr Cline will be the lead TA for the project because of her breadth of expertise in risk assessment, chemical fate and transport, regulatory requirements, risk-based redevelopment issues, and existing knowledge of the project. She will rely on routine support from Claire Marcussen, who has worked with Dr. Cline on numerous projects over the past seven years and has significant experience in EPA protocols, risk assessment and project management/project delivery.

To ensure that the interests of the community are adequately represented as technical needs may evolve, and to help meet schedule requirements, including unexpected short deadlines, additional support and expertise may be needed over the duration of the project. Therefore, Water and Air Research has been identified as a local company

that can provide additional support on this project as Water & Air has supported Dr. Cline on similar types of technical work in the past. While Water & Air is based in Gainesville, it has no prior technical involvement with the Cabot/Koppers site. However, the Water & Air personnel indicated below have worked at numerous contaminated cleanup sites, including Superfund sites elsewhere, with similar issues and concerns.

The services of these local experienced professionals will be sought as needed to provide support on specific technical issues, external reviews of deliverables, and/or help to organize and expedite the review process to meet schedule needs. The core technical team allows ready access to professionals with knowledge in a range of skills and backgrounds. Brief biographical summaries of the supporting team members are attached.

Dr. Elmer Akin has also been added to the team because of his background in toxicology and public health and past experience as the head of EPA Region 4 risk assessment group. His role will include providing more in-depth responses to questions on specific chemical health effects, and also speak on the community's behalf if requested.

It is also recognized that a range of technical issues may develop that require specific in-depth expertise. Dr. Cline intends to work with PGC to identify and seek additional input from other experts, all of whom have well over 20 years experience, as needed to more fully inform the public and provide greater confidence in the information provided as issues are summarized.

Team Member	Role
Dr. Pat Cline	Lead Technical Advisor/ Project Director. Breadth of experience dealing with contaminated sites including chemistry, chemical fate, risk assessment, site knowledge, review of relocation information.
Claire Marcussen	Project Coordinator - Risk assessment issues, Technical review, project delivery
Dr. Jerry Steinberg, P.E.	Project Engineer. Support particularly on review of design documents and remedy implementation oversight.
Dr. William Zegel, P.E.	Technical Lead – Air. Support for Air Impact Issues/questions
Charles Fellows	Technical Support - Chemistry and Ecological risk. Support as needed for review of work plans, data, and contaminated sediment issues.
James Hirsch, P.G.	Technical Support - hydrogeology . Support on review of groundwater issues
Dr. Elmer Akin	Technical Support – Toxicology/Public Health. Support particularly for more in depth understanding of chemicals (specifically dioxins) and EPA Region 4 risk management decision process.

TEAM QUALIFICATIONS

The SEA team offers a unique combination of technical expertise, applied practical experience at a number of Superfund sites, and a high-level ability to efficiently *identify, evaluate, and address* critical issues at complex sites. To satisfy the PGC's needs, SEA has assembled an outstanding team of experts designed to directly support the disciplines, areas of experience, and proficiencies identified by PGC in the RFP. The team is also designed to offer related services and specialties that may arise under this contract (e.g., dioxins, innovative remedial technologies, land re-use, etc.). Another unique characteristic of the SEA team is that our members have maintained a successful and on-going working relationship with the PGC, as well as the community, city and county government agencies, and GRU specifically as it pertains to ongoing technical concerns and issues associated with the Cabot/Koppers site. Many of SEA team members are also members of the local community for over 20 years, and have established

a long-term interest in the Cabot/Koppers site and have volunteered their time to help our community pursue the most effective cleanup possible. As a result, the SEA team is already well versed in the major issues and concerns that have been raised over the last 5 years by the community, the local health department and governmental agencies, as additional studies and reports have been released to attempt to address these concerns. SEA has also had routine interaction with EPA, the lead regulatory agency directing the cleanup of the site, which provides insight to our approach to effectively convey the community concerns as SEA provides technical comments to be submitted on behalf of the community to EPA. A brief biosketch of the key SEA team members is presented below.

PATRICIA CLINE, PH.D.

President, Strategic Environmental Analysis (SEA), Inc.

Dr. Patricia Cline is the founder and principal at Strategic Environmental Analysis, Inc. (SEA), a certified woman-owned business/minority business enterprise (WOB/MBE), specializing in providing integrated strategies to evaluate impacts to soil, surface water and sediment, groundwater, and air; then work with clients and stakeholders to develop and communicate approaches to maximize risk reduction. With over 25 years of technical experience, Dr. Cline has the innate ability to utilize risk-based evaluations and spatial data analysis in understanding the potential impact of stressors on humans and the environment that has resulted in her firm's successes in achieving site closures to support site re-use and redevelopment. These successes are a result of her ability to conduct not only focused investigations and evaluations but in conducting these activities in the most strategic manner possible that ensures the most effective allocation of client resources while ensuring the protection of human health and the environment. Dr. Cline is often sought out for her ability to integrate information and develop conceptual models that clarify project goals and focus the risk-based decision process.

Dr. Cline's tenure in environmental consulting and research has also brought her the recognition as a technical expert resulting in her appointment at the Center for Environmental and Human Toxicology at the University of Florida, selection to serve on the State Risk-Based Priority Council, serving on the Arsenic task force, and she continues to receive requests as an invited speaker on evaluating emerging environmental issues. Her technical background began with her advanced education in chemical fate and transport which she brought to several large consulting firms, as a technical lead and project manager at CH2M Hill and Golder Associates, Inc. until 2003 when she established SEA. At SEA she continues to support clients in risk-based decision making, project approach, and design, implementation and interpretation of site data leading to remedial action strategies. Dr. Cline's breadth of experience spans nation-wide to include extensive knowledge and applications of federal and state environmental regulations as well as applying this experience on projects abroad.

For this project, she is in the unique position of having reviewed many of the recent documents as consultant for the city, and is familiar with the local, state and federal participants in the process as well as interactions with Mitch Brouman/Beazer and the consultants that have been performing the studies.

CLAIRE MARCUSSEN, BA

Senior Human Health Risk Assessor

Ms. Marcussen is a biologist with 26 years of experience in environmental toxicology and chemistry with the last 24 years in environmental consulting with an emphasis in conducting a broad spectrum of human risk assessment applications and assisting in ecological risk assessments. She possesses strong skills in project/team coordination; project management, data interpretations; as well as identifying regulatory and health impacts of such

interpretations. She routinely provides risk assessment support for CERCLA, RCRA and State-lead remedial response programs and permitting projects, and performs senior technical reviews of various environmental assessment documents for private and government clients. Ms. Marcussen has provided technical oversight support to EPA and numerous State regulatory agencies and private clients in a broad spectrum of risk assessment applications to address various aspects of the CERCLA, RCRA, and state remedial response programs to include conceptual site model development, nature and extent sampling, and development of risk-based remedial goal options. Currently, Ms. Marcussen is serves part-time as a Senior Risk Assessor for TechLaw, Inc. and as a senior project manager for SEA, Inc. providing technical support for a number of government and private sites. Her primary activities include conducting senior level technical review and QA/QC of risk assessments, components of RI and FS documents such as work plans, sample and analysis plans, Proposed Plans and ROD documents as well as assisting in the preparation of such documents. Ms. Marcussen also has direct technical experience in most EPA regions and many states across the nation.

DR. ELMER AKIN, PH.D. AND MS IN PUBLIC HEALTH, BS IN PHARMACY

Senior Toxicologist

Dr. Akin is an independent private consultant providing technical support to small companies on an as-needed basis. Dr. Akin is a senior toxicologist and microbiologist with over 35 years of experience with the Federal Environmental Protection Agency of which he served as the Chief of the Office of Technical Services at EPA Region 4 for 16 years. As the Chief of TSS he was responsible for directing the Superfund human health and ecological risk assessment program which provided technical support to private and government facilities across the Southeast. Prior to EPA, Dr. Akin has served as a pharmacy officer for the U.S. Public health service. In 2003 Dr. Akin retired from EPA and serves as a private consultant to several firms with a focus on environmental justice concerns and human health exposures, with recent experience reviewing circumstances and potential hazards associated with a dioxin release from a private industry in Carroll County GA. Dr. Akin has in-depth knowledge of federal and state remedial response regulations and guidance during his tenure at EPA when he served as a principal advisor to the Waste management division director and division managers on risk assessment and toxicological issue that arose in the administration of Superfund/RCRA regulations. He also served as an expert to legal staff in providing expert testimony and expert reports. Dr. Akin had been instrumental in the development of risk communication tools for EPA and conducted and taught courses in risk assessment and risk communication for federal and state regulatory personnel and community interest groups.

JERRY STEINBERG, PH.D., P.E., B.C.E.E.

Professional Engineer

Dr. Steinberg is a Professional Engineer who has worked at state and federal (including Superfund) cleanup sites. He has prepared corrective measures feasibility assessments, risk assessments, and selected and designed remedial actions, documenting these in remedial action plans (RAPs). Dr. Steinberg has worked with the EPA and US Department of Justice to evaluate cleanup issues at Superfund and federal cleanup sites not on the National Priority List and has worked with EPA Region IV on RCRA cleanup of lake sediments.

Dr. Steinberg's prior work related to hazardous wastes includes: defining pollutant transport at waste sites; developing and evaluating remedial options for waste site cleanup; evaluating risks and risk-based cleanups; developing hazardous waste management plans; and preparing hazardous waste facility permits. He has worked directly with regulatory agency staff to negotiate types and amounts of testing and restoration measures needed

to address agency enforcement actions. He also has provided expert testimony related to Superfund sites, other federal cleanup sites, and state contamination sites.

In addition to preparing RAPs, Dr. Steinberg has prepared detailed cleanup specification documents and bid documents so that contractors could be chosen for actual cleanup work. Once bids were distributed and received, Dr. Steinberg evaluated them and prepared required documentation comparing bids and identifying responsive bidders. He worked with agencies and responsible parties to selected qualified bidders and then developed contract documents.

Dr. Steinberg has supervised construction and cleanup activities at various types of contamination cleanup sites. This includes excavation of contaminated soils, installation of specialized equipment to treat contaminants, and construction of long-term contaminant removal systems. He works directly with contractors to assure that cleanup activities are carried out per specifications and RAPs. He oversees testing and other quality control measures taken to provide assurance that acceptable levels of cleanup are attained. Once cleanup work is finished, Dr. Steinberg prepares as-built drawings and other materials required to document work completion.

WILLIAM C. ZEGEL, PH.D, P.E., B.C.E.E.

Senior Engineer

Dr. William Zegel is an environmental engineer who specializes in air quality assessment and modeling of airborne contaminants. He is a Professional Engineer and a Board Certified Environmental Engineer of the American Academy of Environmental Engineering. He is experienced in estimating and measuring offsite impacts of hazardous materials from accidental and intentional actions. For example, Dr. Zegel works at contaminated sites to help evaluate the possible toxic chemical exposure to nearby residents and workers. At a site where a release of butadiene caused an explosion and fire, Dr. Zegel performed source analyses and atmospheric modeling of chemical concentrations in the air in the surrounding area during the two-day event. In another case, he was mutually selected by Jacksonville Electric Authority and the Sierra Club to comment on and assist in resolving outstanding Petroleum Coke Testing Protocol issues at a coal-fired power plant.

Dr. Zegel not only interprets air quality data generated by others; he routinely designs layouts for and participates in ambient air testing of both chemical and particle dispersion. He has performed field work and modeling related to the movement of dust from industrial sites to residential areas. These efforts include those concerned with movement of surface soils, cement dust, lime rock dust, and fine calcium hydroxide particles. Using his background as a chemical engineer, Dr. Zegel has worked at contamination cleanup sites to review remediation plans for cleanup of chlorinated solvents. His evaluation was presented to those representing various interests in the site and helped all parties better understand the benefits and limitations of the proposed remediation strategy.

CHARLES R. FELLOWS, M.S.

Senior Environmental Scientist

Mr. Fellows is an environmental chemist with over 30 years of experience dealing with environmental contamination projects that have been overseen by state and federal agencies. Mr. Fellows routinely interprets collected chemical and physical data and discusses them in the context of appropriate regulatory criteria and standards. In addition to a substantial amount of field activities, his seven years spent supervising environmental testing laboratories provides him with in-depth understanding of water, soils, sediment, wastes, and tissue analyses and how to evaluate whether such data are acceptable or flawed.

During much of Mr. Fellows' career, he has focused on soil- and sediment-related contamination issues. For soil contamination sites for metals and organic contaminants, he has authored and critically evaluated the adequacy of remedial investigation and feasibility plans and remedial action plans, including work plans, quality assurance and control plans (QAPs), and remedial investigation reports. Mr. Fellows routinely works with hazardous waste and agency proscribed procedures for sampling and analysis of environmental media. Much of Mr. Fellows' work has involved the use of EPA risk-based cleanup levels and Florida Soil Cleanup Target Levels with regard to occupational and residential exposure issues and handling and disposal options of impacted materials. In many of Mr. Fellows contamination site work plans, he has prescribed the use of statistical analysis of testing results in order to help define contamination impacts and point out impacts versus background conditions. When reviewing work plans, Mr. Fellows focuses on types of testing, sampling locations, and numbers of samples so that testing results will provide useable and defensible data.

JAMES D. HIRSCH, M.S., P.G.

Senior Project Geologist

Mr. Hirsch is a registered Professional Geologist and degreed hydrogeologist who specializes in groundwater resource management at contamination cleanup sites. His work focuses on both the assessment aspect of cleanup and on remedial investigations tailored to evaluating and designing remediation strategies. As part of this work, he develops plans for and conducts pilot tests. He then uses pilot testing results to demonstrate feasibility of remedial strategies and to provide information for remedial system design.

As part of his groundwater resource management work, Mr. Hirsch locates, plans, lays out, and permits potable and non-potable wellfields. To accomplish this, he often designs well specifications, conducts aquifer performance testing, and performs groundwater modeling. He develops boring plans to acquire information on the subsurface environment. He evaluates and characterizes soils and aquifer properties in order to design and specify well construction. He often uses preliminary data and models to design contaminant monitoring wells. He understands that improperly designed wells can "miss" contaminated strata and thereby yield inadequate or misleading data. At contamination sites, he has shown that samples collected just a few feet (vertically) apart show very different results, leading to incorrect conclusions regarding the need for cleanup.

Mr. Hirsch uses various groundwater models to predict contaminant movement from contamination sites. He uses models to evaluate contaminant capture zones that can result from various layouts of remediation wells. He often uses horizontal wells to provide adequate removal of contamination, especially in those instances where conventional vertical wells cannot provide sufficient cleanup. His work with groundwater models provides a basis for reviewing hydrogeologic reports prepared by others. By evaluating the types and quality of model input data, Mr. Hirsch is able to evaluate the reliability and limitations of model results.

COST PROPOSAL

The PGC TAG Grant budget for technical advisor support is \$42,000 over two years, with a projected estimate of 420 hours for the TA assuming an average hourly rate of \$100/hour. The rates of the technical team members are expected to vary depending on the activity to be conducted and the level of expertise required to complete the activity. Based on SEA's experience and familiarity with the technical documents and community concerns, the labor categories to be used are as follows:

Expert/specialist Level	120
Senior level	100
Mid level	60
Administrative support	20

It is anticipated that the average hourly labor rate will be approximately \$100/hour with a majority of the hours by Dr. Cline (Senior Level) with additional support by local specialists; this assumption is based on SEA's intimate familiarity with the significant technical issues and concerns that have been raised by the local community as well as knowledge of the effort required to research and present technical summaries associated with this site. The mid-level and administrative support level categories are relegated to more routine technical support activities that provide the more senior staff with information they need to complete their tasks more efficiently.

Given this approach, the budget for each of the tasks will coincide with those specified in the project work plan:

Task 1	Historical Summary and Timeline	Labor	5,000
Task 2	Major Issues, Summaries and Fact Sheets	Labor	5,000
Task 3	Feasibility Study	Labor	15,000
Task 4	Remedial Design	Labor	11,000
Task 5	Remedial Action	Labor	5,000
	Travel (Government Per Diem)		1,000
		Total Cost:	\$42,000

The labor rates established for this project are inclusive of direct labor, profit, indirect costs (insurance, accounting, office supplies) and subcontractor costs which typically are 10-20 percent of the overall income.

One or two regulatory meetings may occur either in Atlanta or Tallahassee, thus it is proposed that \$1,000 be set aside for federal government per diem travel, or other incidental expenses.

The PGC may not have flexibility in reallocating budget among the defined tasks. There should be a scoping meeting and weekly updates on the budget and schedule.

DELIVERABLES:

- Issue summaries for the website
- Presentations and assistance with development of comments on the proposed plan
- ROD fact sheet and presentation
- Summary of responses to comments
- Memorandum on the remedial design
- Updates on remediation progress
- Final report on the final inspection report (Remedial Action)

ASSUMPTIONS:

All documents will be provided in electronic format. At this time, only the Fact Sheet prepared for the ROD will be added to the repository. No expenses for printing or distribution of factsheets are assumed.

The critical time period is the next approximately 12 weeks when it is anticipated the comment period on the proposed plan will end.

IN-KIND SERVICES

Dr. Cline is committed to providing the best support to the community that is within her abilities. She recognizes that simple summaries of documents will not be sufficient to provide this motivated and capable community with the depth of understanding and tools to be most effective in influencing this process.

We believe the budget is not sufficient to do in-depth analysis on all subject areas, and disagree with EPA on the decision to limit the grant given the complexity and disconnected status of the reports. This may be an ongoing discussion with EPA. However, our goal at this time is to use the available resources to best engage the community in the process.

As a member of the community, Dr. Cline is committed to extend the services she can provide by contributing in-kind services that will allow her to be more effective in this effort. She commits to spending 40 to 80 hours of time over the next 12 weeks for several activities that may include:

- Attending additional meetings
- Responding to issues outside the specific scoped items (new work plans, sampling results, etc.)
- Researching technical issues
- Evaluating technical issues in greater detail than may be required for an issue summary.
- Finding outside experts who may offer insights into core issues.
- Providing the city with technical comments that may be submitted to EPA.
- Working with an intern (see below).

In this regard, she may seek the support of the community members to assist on some of the tasks, particularly those outside of the identified scope (e.g. reviewing the administrative record file and completeness of the list of

supporting documents) and editorial review/input on the website issue summaries. These collaborations will increase our effectiveness and efficiency.

In addition, SEA has been contacted to consider employing an intern this fall from University of Florida who is seeking a project dealing with public health. If selected for this project, SEA will agree to take on this responsibility, and work with the PGC on options for projects that may support their overall goals, addressing specific questions of interest while providing real and practical experience. This would also expand the access of the group to resources at UF.