State Innovation Grant Program
GA DNR Project Narrative/Workplan

I. Project Title

Joint Proposal to Explore the Role of an Environmental Management System (EMS) in Brownfield Redevelopment

II. Applicant Information

Georgia Department of Natural Resources' (GADNR or DNR) Environmental Protection Division (EPD), lead agency, in partnership with DNR's Pollution Prevention Assistance Division (P^2AD)

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III. Funding Requested

$79,393

IV. Project Period

August 4, 2008 (pending date of approval) – September 30, 2011

V. Narrative Elements

A. Project Overview

GA DNR proposes to explore the use of an environmental management system to institutionalize environmental considerations in the redevelopment of a large brownfield site – the former Ford Hapeville Assembly Plant, now owned by Jacoby Development. EMS programs are typically implemented at operating manufacturing facilities. When such facilities close, EMS implementation terminates for the property. This project seeks to develop an innovative EMS process to facilitate implementation of environmentally sustainable practices throughout remediation, redevelopment, and reuse of contaminated properties. While green redevelopment is a goal of brownfield programs nationwide, no such tools currently exist to guide developers through the process or assure their financiers that green redevelopment makes financial sense. The ultimate goal of the project is creating a replicable model of brownfield redevelopment using

an EMS, while achieving better environmental performance and public participation in the process. The Project Logic Model (Attachment A) details the many short-term, intermediate, and long-term outcomes that this project seeks to achieve.

EPD, P2AD and Southface (the project team) will collaborate on the project, testing the application of an EMS to Jacoby's redevelopment of the Ford Hapeville site into a mixed-use development.

The team will assist Jacoby in creation of its EMS for the site's redevelopment, and in documenting the components of this EMS. Given the time frame for the completion of this grant, and the time estimated for completion of the redevelopment of the site, this project will only be able to document the integration of the EMS into the construction phase of the site (see Section C. below for a discussion of Jacoby's commitment to see the EMS carry through to the operations phase).

The team will then take this EMS documentation to stakeholders of the site's redevelopment (and of brownfields redevelopment in general) and explore how the components of this EMS might be reframed into language/format that speaks to the development community and addresses environmental concerns common to most brownfield redevelopment activities. The result of this facilitated dialogue with stakeholders will be an EMS for Brownfield Redevelopment Manual.

Upon completion of this project, this manual will be utilized by Georgia's Brownfields Program to educate industry and developers about the opportunities and process for green redevelopment. Documentation from the Ford Hapeville site and subsequent projects will provide a basis for the financing of green construction [knowledge]. Successful implementation over time will lead to these practices becoming commonplace among developers [behavior]. As the numbers of acres redeveloped and people served by such projects grows, the benefits of increasing sustainable communities will provide cumulative improvements in Georgia's environment [changes in environmental condition].

This project will be coordinated through the Partnership for a Sustainable Georgia, an environmental performance-based leadership program, operated by P^2AD and modeled on EPA's National Environmental Performance Track (NEPT). The program currently has 160 Partners, participating in four program levels: Champion (advocate), Bronze (on-ramp), Silver (EMS, roughly NEPT equivalent) and Gold (NEPT plus). In addition to developing an EMS, Silver Level Partners commit to conducting community outreach/volunteerism, and supply chain activities and Gold Level Partners also commit to conducting mentoring and sustainability activities.

By entering the former Ford Hapeville site into the Partnership for a Sustainable Georgia as a Bronze Level Partner, Jacoby will tap into an existing framework for EMS technical assistance and training, and sharing of best practices with the other members of the Partnership. This property represents the first enrollment of a redevelopment project in the Partnership and will serve as a pioneer for future growth in the Partnership. By working closely with this site during development of the innovative EMS, a model will be created for future redevelopment partners to follow. The role Partners play in mentoring new Partners provides the program with additional resources for replicating success using the Ford Hapeville site as a model.

B. Current Situation and Need

Industry Overview

Following years of extensive outreach by EPA and the states, local governments and developers are now making significant progress in redeveloping contaminated properties. In Georgia alone, more than 70 brownfield sites are being redeveloped every year. While these redevelopment projects succeed in reducing the presence of contaminants and returning properties to productive use (and tax generation), they largely do not take advantage of the great opportunities they present for integrating sustainable building practices, technologies and operational practices into the new life of the property. Consideration of the environmental impacts of redevelopment is generally limited to satisfying the applications for the necessary permits relating to remediation and land disturbance activities, with little thought for the long-term operational impacts dictated by the front-end design. In the pervasive current model of development, there is a disconnect between most project developers and the future operators of the property, posing additional challenges in comprehensively addressing the environmental impacts of the development.

Opportunity for this Project

Jacoby Development is known as perhaps *the* leader in green/sustainable commercial development in Georgia, with their Atlantic Station project lauded nationally as a success and benchmark in smart growth and sustainable development. Atlantic Station is a multi-billion dollar redevelopment of the 135-acre former Atlantic Steel Industries plant in midtown Atlanta. Jacoby teamed with EPA's Project XL, GA EPD and dozens of other stakeholders to transform this contaminated eyesore into a vibrant live, work, play community. According to EPA Administrator Stephen Johnson, "Atlantic Station is a model to the rest of the nation." In the wake of this success, Jacoby is the perfect partner to engage with EPA and the State of Georgia in exploring the next wave of innovation in its redevelopment of the Ford Hapeville Site.

GA EPD brings significant institutional knowledge of brownfield redevelopment to the project. The Georgia Brownfields Program was begun in 2004, funded by a federal grant (CERCLA 128(a) Grant) from EPA. Prior to establishment of the program, Georgia amended its Brownfields statute, the Georgia Hazardous Site Reuse and Redevelopment Act, in 2002 and 2006 to create incentives for cleanup and redevelopment of contaminated properties. This legislation provides a limitation of liability for groundwater cleanup costs and third party claims for qualified prospective purchasers willing to investigate releases of hazardous constituents to the environment and conduct any necessary cleanup of contaminated soil and source material. To date, approximately 252 qualifying properties have been entered into the Georgia Brownfields Program.

In May of 2003, additional Brownfields incentives were created by amendments to the Georgia tax code that allow for preferential assessment of contaminated properties undergoing cleanup and redevelopment. Purchasers of Brownfields properties have the potential to recoup their investigation and cleanup costs over a ten-year period through a freeze of the assessed value of their property.

P^2AD brings to the project team expertise in EMS, and a framework to assist Jacoby in developing an EMS for the Ford Plant redevelopment. It is also well positioned to leverage the extensive research and technical assistance capabilities of its partners to assist with this project as needed.

The project team also includes Southface, a not-for-profit organization in Atlanta looked to as a national resource in green building practices and sustainable development. Southface assisted Jacoby on the Atlantic Station project with preparation of LEED project documentation and

facilitating stakeholder design charettes. They have deep experience in evaluating green building practices and technologies, and in working with the construction and development community to implement them. Southface's Director of Sustainable Development will be responsible for the stakeholder engagement portion of this project (Task 4), working directly with Jacoby, other developers, brownfield restoration expects, and local community representatives to translate a traditional EMS framework (using this site's EMS documentation as a model) into the scale of a large brownfield redevelopment project.
Southface will:

- Convene the project stakeholder group
- Identify appropriate green technologies for consideration at the site
- Author and publish the EMS for Brownfield Redevelopment Manual
- Serve as an on-going resource for implementation of EMS at redevelopment projects.

As a subaward to DNR in this project, Southface will have decision-making responsibilities in guiding the stakeholder process. They will also make a substantial, unique contribution to the project through their established relationships in the building community and with Jacoby.

C. Goals, Objectives and Public Benefit

Properly implemented EMSs can help facilities achieve environmental performance that exceeds regulatory requirements, including aspects that are both regulated (such as pollutant discharges) and non-regulated (such as water and energy use and greenhouse gas emissions). A growing number of businesses understand the financial and environmental value of implementing an EMS.

The intent of the project is to investigate opportunities for use of an EMS to institutionalize environmental considerations in the redevelopment of a large brownfield site. This is in keeping with EPA's policy of encouraging the widespread use of EMSs, across a range of organizations and settings, with particular emphasis on adoption of EMSs to achieve improved environmental performance and compliance, pollution prevention through source reduction, and continual improvement.

While this project does not address specific examples posed in EPA's EMS strategy, EPA acknowledges in its strategy document that it will not limit its consideration of ideas to test to the ones listed in the document. It is the project team's hypothesis that use of an EMS in the development process can:

- Make business sense to developers and incentivize them to further environmental goals
- Simplify/clarify the process that developers should undertake to remediate and develop a brownfield site
- Achieve better and more efficient environmental results than addressing development permit requirements in a piece-meal fashion
- Yield better public involvement procedures and environmental results than traditional development models.
- Provide local governments and other policymakers a resource for the brownfield redevelopment process and how it may interact with local ordinances and codes.

The EMS model to be developed will address the opportunities identified in EPA's draft Sustainable Land Revitalization model (Attachment B), providing a template for developers to evaluate green approaches that are appropriate for their redevelopment sites.

Through the successful completion of this project, the team feels that the following long-term outcomes are achievable:

- Environmental considerations will be integrated into the initial redevelopment of the Ford Hapeville property and non-regulated impacts such as energy consumption, landscape design, water consumption, storm water management, etc. will be addressed.
- A framework and incentives will be in place to ensure that environmental concerns are addressed in the long-term operation of the development. While there is no way of knowing at this time what Jacoby's long-term involvement in the site operation might be, they have committed to working with site tenants and future owners to continue the environmental progress that is made in the initial redevelopment. Given the current market interest in green building, increasing market pressures on energy/water consumption and cultural interest in all things "green," the team anticipates that as Jacoby promotes the opportunities for site tenants to locate in a green development, they will attract businesses that are naturally inclined to support integration of the site's environmental commitments into their operations there.
- Jacoby Development and many other developers will have a new tool that allows them to more easily integrate environmental considerations into future brownfield redevelopment projects.
- Stakeholders of the Ford Hapeville Plant redevelopment will have a better knowledge of the benefits of EMSs
- The economic, social, and environmental benefits identified in the "Sustainable Land Revitalization" framework will be achieved at an increasing number of brownfield sites.

D. Target Dates and Milestones

This project's major tasks and timeline are outlined in the table below. For the sake of space, quarterly progress reports were not included as line items in this table. These reports will be built into project team calendars for the length of the project.

Schedule of Major Project Tasks

Task Name	Task No.	Task Description	Milestones	Start Date	End Date
Research	1	Research redevelopment process for Ford River Rouge Plant in Dearborn, MI	• Trip to MI • Acquisition of sample baseline data	Oct 08	Oct 08
Gap Assessment	2	Conduct gap assessment of existing documentation for pilot site EMS	• Gap Assessment Report • Some EMS documentation • Sample procedures and operational controls	Nov 08	Dec 08
EMS Development	3	Assist Jacoby in developing core elements of pilot site EMS	• Application to the Bronze Level of the Partnership • Application to the Silver Level of the Partnership • Application to the Gold Level of the Partnership • Site EMS documentation package)	Sept 08 Jan 09 Oct 09 Oct 10	Jan 09 Oct 09 Apr 11 Oct 10
Stakeholder Engagement	4	Convene project stakeholder group to translate Jacoby EMS documentation into EMS for Brownfield Redevelopment Manual.	Meeting minutes including: • Number of meetings/ charettes held • Number and diversity of participants.	May 11	Jun 11
EMS for Brownfield Redevelopment Manual	5	Create EMS for Brownfield Redevelopment Manual	Completion of Draft Manual	May 11	Aug 11
Data Collection	6	Collect year annual data on Jacoby's EMS development progress through the Annual Performance Reporting mechanism of the Partnership	Annual Performance Reports (from Hapeville site Partner)	Apr 09 Apr 10 Apr 11	Apr 09 Apr 10 Apr 11
Evaluation & Verification	7	• Conduct EMS site visit to verify progress on EMS implementation and performance • Survey stakeholders to determine effectiveness of outreach, training and facilitation efforts and expand outreach if needed • Overall project evaluation, comparing baseline data to year one and two project data and determining if outcomes were met and the project was effective	Site Visit Report Stakeholder Survey Survey results Data Analysis Report	Jun 10 Jun 11 Jul 11	Jun 10 Jul 11 Aug 11
Reporting	8	Report findings in quarterly reports and Final Case Study Report Present case study at various events	Quarterly Reports Final Case Study Report Presentations	Jan 09 Sept 11 Jul 11	Jul 11 Sept 11 Sept 11

E. Program Outcomes

This section of the work plan summarizes the anticipated outputs and outcomes identified in the Project Logic Model (Attachment A). The actual measures and indicators to be used in this project will be determined after the stakeholder committee has identified its priority environmental aspects, and will be described in detail in the Quality Assurance Project Plan (QAPP), to be submitted in early November 2008 (no later than 60 days from receipt of work plan approval).

Assumptions, Drivers, Barriers & Contextual Factors

The project team used *Module 1: Mapping the EMS Project* from EPA's *Modular Approach to Analyzing EMS Projects and Programs* to design the work plan and attempt to anticipate factors that may impact this project.

Assumptions

- At project kick-off, Jacoby Development will apply for the Ford Hapeville site to join the Partnership for a Sustainable Georgia.
- The Partnership is a multi-tiered, performance-based program centered on the development and implementation of facility-level EMSs. The performance levels of the program increase in requirements and rewards as facilities progress from Bronze to Silver to Gold (where requirements exceed NEPT). It is assumed that the basic structure of the program will remain the same during this project period.
- The Partnership encourages its Partners to develop robust EMSs, which focus on aspects relevant to core activities and/or state and regional priorities. The program also requires continual improvement and improved environmental performance from its Partners.

Drivers

- Need for a tool to encourage developers to address the many unregulated environmental aspects and impacts of brownfield redevelopments
- Need to divert construction and demolition waste from brownfield redevelopments to help address solid waste priorities in the state.
- Need to increase adoption of green technologies in remediation and redevelopment of brownfield sites.
- Need to protect Georgia's surface waters from non-point source pollutants generated through property development.
- Need to create models of water-conserving developments due to extreme drought conditions in the state and increasing development pressure on strained water resources.
- Need to create models of energy-conserving developments due to increase in fuel costs, electricity costs, and increasing transportation challenges in the region.

Barriers

- Difficulty in motivating local community stakeholders to participate, with the project being perceived to lack urgency.
- Addressing a transient stakeholder population in terms of airport passengers and employees.
- Identifying useful EMS models for construction activities.
- Successful implementation of sustainability initiatives due to the rapid changing nature of construction projects.
- Identification and management of aspects and impacts of tenant location and build-out.
- Change management with multiple parties sharing the EMS.

- Incorporating tenants into the existing EMS structure and securing their buy-in.
- Successful transfer of the EMS to future property management company(ies).

Contextual factors

- Staff changes at EPD/P2AD/Jacoby/Southface could cause project delays.
- Significant compliance violation at pilot redevelopment could force removal of the facility from the program and result in delays and data collection challenges.
- Unexpected development costs related to the volatile price of fuel could impact resources Jacoby has committed to the project.
- Continued downturn in the economy could impact the pace of site redevelopment and impact the return on investment for implementing new green technologies into the process.
- Discovery of unanticipated levels/areas of contamination could slow the remediation process and impact resources committed to the project.
- Stakeholder committee could press for a shift in direction or focus of project.
- Environmental Justice principles and practices will be followed.

Measures & Outcomes by Task

The following narrative provides possible outcomes and measures for each task (also see the Program Logic Model found in Attachment A). *Module 2: Assessing the Environmental Results of the EMS Project* from EPA's *Modular Approach to Analyzing EMS Projects and Programs* will be used to guide the process. As the EMS for this project becomes further defined, key aspects will be defined and progress measured. Documentation for the EMS will be maintained in a manner that readily displays measurements for stakeholders and developers interested in applying the model EMS that is being developed.

Task 1: Research redevelopment process for Ford River Rouge Plant in Dearborn, MI

By meeting with redevelopers of the Ford River Rouge Plant, the project team will gain lessons learned in the redevelopment of Ford's most notorious polluter into a model of sustainable redevelopment, and the system for environmental management that was implemented. Measures will reflect outputs such as sample baseline data, and a list of aspects/impacts identified throughout the redevelopment process. Anticipated outcomes of this task are knowledge of successful green technologies and creation of meaningful benchmarks for success of the pilot site redevelopment.

Task 2: Conduct gap assessment of existing documentation for pilot site EMS

Conducting a gap assessment of the environmental documentation Jacoby already has in place for the site design, permitting, demolition, contracting, construction and transfer of ownership processes will generate outputs of EMS documentation. During this task, the team will also compare documentation produced for the Atlantic Station redevelopment project to identify sample procedures and operational controls that can be models for the pilot site. The primary outcome of this task will be streamlining the EMS development process, reducing redundancies with existing management processes.

Task 3: Assist Jacoby in developing core elements of pilot site EMS

Completion of the following sub-tasks will generate outputs of baseline data, aspects lists, objectives and targets, action plans, a legal requirements inventory, communication plans, training documentation, and all other documentation of operational controls and procedures relating to the site EMS.

3a. Establish baseline

3b. Determine site's aspects and impacts and prioritize which are significant

3c. Define measurable objectives and targets, and develop action plans
3d. Inventory legal requirements and develop procedures for maintaining compliance
3e. Communicate with/train site contractors and tenants on aspects, action plans and legal requirements
3f. Identify measurement and monitoring needs and operational controls
3g. Establish corrective action and document management procedures
3h. Conduct management review

Outcomes will include a functioning EMS for the site, which will lead to a redevelopment that integrates the full environmental impacts of the site into the management process and creation of a replicable model of brownfield redevelopment.

Task 4: Engage community/stakeholders

Prior to the inception of this pilot project, Jacoby Development was engaged in an extensive stakeholder engagement process for redesign of the Ford Hapeville site. While the team expects there would be little stakeholder interest in following the painstaking process of developing an EMS for the site, it does see community outreach and engagement as a critical element to a successful EMS. As the Ford Hapeville site progresses with its EMS development and moves from the Bronze to the Silver Level of the Partnership for a Sustainable Georgia, it must also be able to meet the program requirement that Silver Level Partners create a two-way dialogue with their communities (soliciting input in their EMS and also informing them about site environmental priorities) and commit to supporting community environmental efforts.

The project team also anticipates value in engaging the development/regional planning community to provide input into the creation of the EMS for Brownfield Redevelopment Manual for Developers.

Sub-tasks of this effort will include the following:

4a. Convene stakeholder committee and present pilot site EMS development process
4b. Solicit stakeholder committee input into converting pilot site EMS documentation into a general EMS for Brownfield Redevelopment Manual for Developers

Measures will reflect outputs such as the number of meetings/charettes held and the number and diversity of participants. Short-term success will consist of identifying stakeholders with interest in creating an EMS for brownfields redevelopment projects, and formalizing a process for addressing stakeholder concerns and suggestions. Stakeholders could include, but are not limited to, the City of Hapeville, Hartsfield Area Transportation Management Association, Georgia Chapter of the National Brownfields Association, Urban Land Institute, Livable Communities Coalition, Atlanta Regional Commission, Georgia Regional Transportation Authority, U.S. Green Building Council- Atlanta Chapter, Clean Air Campaign, and the EPA Region 4 Brownfields Program. Long-term, the project should result in a higher level of collaboration among the industry, regulators, and the surrounding community for a more systems-based approach to achieving better environmental results than the traditional regulatory approach.

Task 5: Create EMS for Brownfield Redevelopment Manual

Outputs relating to this task will be stakeholder committee feedback on pilot site-specific EMS, input on elements to include in more general EMS for Brownfield Redevelopment Manual, and the final Manual itself. Outcomes of the creation of this manual will be a clear, documented process for other developers to integrate long-term environmental impacts of redevelopment of brownfields sites; and removal of a barrier to brownfield redevelopment (complexity of process).

With more brownfield redevelopment come a number of the environmental results listed in EPA's Sustainable Land Redevelopment model (Draft 04/08).

Task 6: Data Collection

The project team will use *Module 3: Assessing the Costs and Cost Savings of the EMS Project* from EPA's *Modular Approach to Analyzing EMS Projects and Programs* to assist in accurately quantifying the efficiencies gained by regulators, pilot facilities and the community as a whole as a result of this project. Examples of measures will be:

- Faster time to market for redevelopments
- Return on Investment (ROI) from implementation of green technologies/building practices
- Number of permit modifications avoided
- Water consumption
- Stormwater discharge volume and quality
- Energy savings
- Carbon equivalents compared to previous land use
- Air emissions compared to previous land use
- Reductions in solid and hazardous waste generation rates
- Tons of construction and demolition materials diverted from landfill.

More detail regarding the anticipated data sources, schedule for data collection, monitoring, reporting and record keeping requirements will be provided in the project QAPP. As a general approach, the project will rely upon accepted engineering models to measure outcomes where monitoring actual results is not feasible. Also addressed in the QAPP will be responsibilities for the regulator, pilot facilities, and independent party auditors regarding enforcement and compliance assurance during the project period. The project team will use *Module 4: Enforcement and Compliance Assurance* from EPA's *Modular Approach to Analyzing EMS Projects and Programs* to assist in refining this portion of the project, including drafting a project agreement for pilot facilities.

Task 7: Evaluation & Verification

The project team will use *Module 2: Assessing the Environmental Results of the EMS Project* from *EPA's Modular Approach to Analyzing EMS Projects and Programs* as a tool to refine methodology for evaluation and verification of the project goals, results, and effectiveness. Short-term outcomes relating to effectiveness of stakeholder outreach and meeting facilitation will be measured using surveys, and efforts will be revisited if needed to meet the project goal of an informed, diverse stakeholder committee. Progress on EMS implementation at the Jacoby development will be measured through a site visit, using a set protocol. Partnership for a Sustainable Georgia performance measures/ requirements will be assessed mid-project to determine if they need to be modified, and will be refined if needed. A thorough evaluation of data collection methodology will be conducted subsequent to collecting year one data, and modified if needed to facilitate better collection of year two data.

Task 8: Reporting

Measures will include outputs such as quarterly reports and the final case study report submitted, and presentations made regarding completion of the project. The changes in knowledge and behavior resulting from the publication and presentation of the project case study will be measured in the increase in calls to EPD's Brownfield Redevelopment Program, and the increased number of applications from developers to redevelop brownfields and join the Partnership for a Sustainable Georgia.

Overall Project Measures & Outcomes

While many short-term outcomes of the project can be measured subsequent to completion of individual tasks, many other outcomes relating to changes in attitudes and behaviors will be measured at the conclusion of the project. Examples of these outcomes may be:

Meeting State Implementation Grant Criteria

5.2.1.1 Target National Priority Environmental Issues

The proposed project is expected to address many of EPA's national priorities (smog, greenhouse gases, water quality, and water infrastructure). The project will consider the use of advanced storm water management technologies to improve the on-site re-use of storm water and quality of storm water released into the municipal system. Jacoby will also look for opportunities to use green roof and pervious surface technologies to minimize storm water run-off and improve water quality. The project will consider incorporating renewable energy technologies, including, but not limited to, photovoltaic, plasma arc, and micro wind turbines to reduce the greenhouse gas impact of energy consumption by the project. In addition, alternative transportation technologies will be evaluated to further reduce greenhouse gas emissions and smog formation. Finally, a number of rainwater and storm water retention technologies, as well as xeriscape landscaping, will be considered to reduce potable water usage for landscaping and other gray water uses.

5.2.1.2 Building on Our Existing Knowledge of Innovative Approaches and Expanding the Testing of Priority Innovations

Through evaluation of innovative approaches used by Ford at the River Rouge facility the project team will identify barriers to implementation of these innovations at that facility, and analyze the impacts of various technologies as installed. This will allow us to better evaluate the effective and rapid deployment of these innovations in the Hapeville project. This will provide Jacoby will valuable information necessary to evaluate the efficacy and ROI of these various innovations in this and future projects. This will address the lack of time necessary to investigate and evaluate innovations, one of the major barriers to innovation in construction/ development projects

5.2.1.3 Measured Improvement in Program Results from Project Implementation

Types of measures that will be tracked during this project include:

- Environmental aspects and impacts of pilot site activities, including amount of recycled materials used in construction and energy saved through the use of renewable energy technologies
- Financial benefits
- Public involvement.

5.2.2.1 Addressing Other EPA Regional-State Priorities

As detailed above, Jacoby Development has a demonstrated history of utilizing cutting edge technologies and management practices to reduce the water and energy consumed in the development and operation of their projects. This project is expected to provide a replicable model of a brownfield redevelopment that addresses regional and state priorities of conserving water resources and reducing energy consumption. The project is also anticipated to show measurable results towards addressing P2AD's priorities. The division has identified, through research and stakeholder involvement, that its top environmental priorities are reduction of greenhouse gases, urban toxics, impervious surfaces, Municipal Solid Waste (MSW) generation, Particulate Matter (PM) 2.5, and water withdrawals and consumption. The project team expects that the Ford Hapeville site redevelopment using an EMS framework will achieve results for all of these objectives.

5.2.2.2 Institutional Readiness and Commitment

The Partnership for a Sustainable Georgia has been useful in helping establish a strong collaborative relationship between P²AD, EPD and business environmental stewards in the state who have become Partners. Part of the foundation for this relationship is the MOA signed by EPD, P²AD, and EPA in April 2004 wherein the parties agreed to support voluntary, EMS-based approaches to environmental performance and to seek opportunities to provide incentives for superior environmental performance, including regulatory flexibility.

F. Transferability

The purpose of this project is to learn how EMS implementation can be integrated into the brownfield redevelopment process, resulting in a win-win for the developers and tenants of the site, EPD, and the communities surrounding these facilities. Learning will take place for the facilities, regulators, and citizens involved in the project through the stakeholder process. This innovative approach could be a model in the state to promote the operational efficiency and financial savings that can be realized by implementing an EMS at the site-level.

Partnership for a Sustainable Georgia

The approach used in this proposal provides a model to transfer lessons learned to other Partners through the Partnership for a Sustainable Georgia. One specific conduit of transfer is the networking events that bring Silver and Gold Level Partners together with EPD senior staff to build collaborative relationships and discuss regulatory topics.

It is anticipated that Jacoby Development will play a role in transferring lessons learned from this project. As it progresses to the Silver and Gold Levels of the Partnership, Jacoby will then be able to select activities for the site to meet Mentoring, Supply Chain/EPP, or Sustainability commitment requirements (of the program) that support innovation transfer. The following are examples of how this project might be expected to spur future collaborations and transfer of project knowledge:

- Jacoby may offer site tours to other developers that include a discussion of the benefits of their EMS.
- Jacoby may choose to work closely with another developer to mentor them through creation of their own brownfield redevelopment EMS.
- The project team may present a case study on the pilot project to a Sustainable Atlanta Roundtable (monthly venue for developers/architects relating to sustainability issues).
- Jacoby typically works with consultants to assist in preparation of its permit applications and modifications, and is expected to involve these consultants as stakeholders in this project. Incentivizing these consultants to participate and implement lessons learned with other clients may fulfill one of the site Supply Chain commitments.

Other Outlets

Finally, state-to-state (peer-to-peer) learning and transfer will take place through several venues, including the Multi-State Working Group and the Environmental Council of States, both of which include representatives from Georgia DNR. The project team will share the final report and project findings online, through events such as the National Environmental Partnership Summit, and through NEPT outreach opportunities (including the Performance Track Participants Association). The project team will also present project findings to other appropriate meetings and conferences, such as the Air & Waste Management Association Annual Conference, EPA's annual Brownfields Conference, Greenprints, ULI's annual conference and perhaps Greenbuild.

Methodology
The project team will use *Module 6: Assessing the Potential Transferability of the EMS Project* from EPA's *Modular Approach to Analyzing EMS Projects and Programs* to aid in optimizing the diffusion of innovation gained through this project. Initial project stakeholder meetings will explore questions relating to relative advantage, compatibility, ease of adoption, trialability, and observability. The results of these discussions will shape the direction of the project (e.g., design of surveys, project evaluation, performance measures).

G. Public Involvement

One of the goals of the project is to engage brownfield site stakeholders in understanding the value that EMSs can bring to the long-term operation of the site. In order to meet this goal, the project team has designed public involvement into the core of the project. Task 4 of the project will focus on identifying stakeholders and convening an engaged stakeholder committee (see Section E, Task 4 for a full description of the subtasks and anticipated measures, outputs and outcomes relating to stakeholder engagement).

The project team will use *Module 5: Public Involvement and Stakeholder Feedback* from EPA's *Modular Approach to Analyzing EMS Projects and Programs* as a tool to guide the design, implementation and evaluation of the community involvement approach. It will also reference EPA's *Public Involvement Policy* and other public involvement tools and resources posted at EPA's website throughout the project.

H. Qualifications

Thatcher Young, P^2AD
Thatcher Young has been a Partnership Representative to the Bronze Level in the Partnership for a Sustainable Georgia since March 2007. Thatcher facilitates partner interaction, provides EMS design and implementation assistance, and aids Bronze partners in progression to the higher levels of the program. He has assisted a myriad of organizations in developing EMSs including Georgia's state lodge parks, universities, private businesses and non-profit organizations. Before coming to P2AD, Thatcher worked for Georgia Electric Membership Corporation in government relations and economic development.

Thatcher will serve as the project lead for Tasks 1, 2, 3,6,and 7.

Gray Kelly, Southface
Gray Kelly has over 18 years of experience in both residential and commercial real estate development and management. Prior to joining Southface in 2003, he was Vice President of Retail Properties at Paces Properties, Inc. and a Project Manager for Design Construction by Craftmaster, a custom home builder in north Atlanta. Gray has primary responsibility for the EarthCraft Multifamily and EarthCraft Communities Programs at Southface, which are residential Green Building Certification Programs. EarthCraft Communities currently interacts with 14 planned communities that encompass over 1,400 acres of land and will contain more than 8,000 units of housing when built-out. He has also gained extensive experience nationally with developers of affordable housing through these programs and through work with Enterprise.

Gray will serve as the project lead for Tasks 4 and 5.

Suzanne Burnes, P^2AD

The P^{2}AD Project Manager, Suzanne Burnes, has been involved in Georgia's environmental performance leadership program, the Partnership for a Sustainable Georgia, since its inception in 2004, and presently acts as assistant director for P^{2}AD as well as manager of the Partnership. In her Partnership role, she coordinates the activities of four Partnership representatives, oversees program improvements and chairs the program's external Advisory Panel (comprised of program stakeholders). In her 16 years of environmental experience, Suzanne has served as a consultant for business, the U.S. EPA and the U.S. Army relating to solid waste reduction, water efficiency, enforcement litigation support and facility assessments, and multi-media compliance assessments.

Suzanne will serve as the project co-advisor for all tasks, and will take the lead for Task 8.

Mark Smith, EPD

Mark Smith is chief of the Hazardous Waste Management Branch at EPD. Responsibilities of his branch include: regulating the facilities in Georgia that generate, treat, store or dispose of hazardous waste; administering the state's Hazardous Waste Trust Fund, cleaning up abandoned sites; and implementing Georgia's Brownfields Program, promoting environmental protection via economic development. Mark assumed direction of the Hazardous Waste Management Branch in October 2004, following seven years as chief of EPD's Land Protection Branch, with responsibilities including solid waste, scrap tires, surface mines, underground storage tanks, and lead-based paint and asbestos abatement. During his 24 years with EPD, he has worked as a permit writer for RCRA hazardous waste facilities and as a manager in solid waste permitting, underground storage tank remediation, and the HSRA or State Superfund program.

Mark will serve as project co-advisor for all tasks.

I. Summary Budget Information (for three-year project period):

Category	Proposed EPA Funds	Proposed State Matching Funds	Total Project Costs
Personnel	$50,693	$47,735	$98,428
Travel	$3,700		$3,700
Supplies			
Contract	$25,000		$25,000
Total	**$79,393**	**$47,735**	**$127,128**

The proposed state matching funds listed represent non-federal, in-kind staff salaries and benefits which will be used to help carry out this project. Forms attached to this narrative show the proposed budget in greater detail. Personnel dollars will be used for P²AD staff to provide EMS technical assistance to Jacoby. Contract dollars will be used to coordinate the stakeholder process and develop the EMS documentation and guidance manual deliverables.