## AMENDMENT NO. 1 TO GRANT AGREEMENT NO. SWIFT 52549

<table>
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<tr>
<th>Grant Agreement Start Date: September 20, 2012</th>
<th>Total Grant Agreement Amount: $120,000.00</th>
</tr>
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<tbody>
<tr>
<td>Original Grant Agreement Expiration Date: June 30, 2014</td>
<td>Original Grant Agreement: $80,000.00</td>
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<td>Current Grant Agreement Expiration Date: June 30, 2014</td>
<td>Previous Amendment(s) Total: $0.00</td>
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<td>Requested Grant Agreement Expiration Date: June 30, 2015</td>
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This grant agreement is between the State of Minnesota, acting through its Commissioner of the MINNESOTA POLLUTION CONTROL AGENCY, 520 Lafayette Road North, St. Paul, MN 55155 ("State" or "MPCA") and CARVER COUNTY, 600 E 4th Street, Chaska, MN 55318 ("Grantee").

### Recitals

1. The State has a grant agreement with the Grantee identified as Grant Agreement SWIFT# 52549 ("Original Agreement") to continue and expand research at the University of Minnesota Landscape Arboretum demonstration site in order to scientifically address questions related to compost technology and co-composted material.

2. This amendment provides for an extension of the term of Agreement, an increase of the grant amount, and a revision of Attachment A (Work Plan and Budget) and Attachment B (Continual Tracking Report) to reflect the refinement of project tasks. This amendment does not constitute a change in project scope.

3. The State and the Grantee are willing to amend the Original Agreement as stated below in order to refine project tasks and costs related to designing, installing, and maintaining a lined sampling collection pad while removing those tasks no longer applicable. The Grantee is not required to provide additional matching funds for the increase in grant funds resulting from this amendment.

### Grant Agreement Amendment

[Deletions are struck out and additions are underlined.]

**REVISED 1.** Clause I, "Term of Agreement" is amended as follows:

1. **TERMS OF AGREEMENT**

   1.1 **Effective Date:** September 20, 2012 or the date the State obtains all required signatures under Minnesota Statutes Section 16C.05, subdivision 2, *whichever is later*. The Grantee must not begin work under this Agreement until the Agreement is fully executed and the Grantee has been notified by the State’s Authorized Representative to begin work.

   1.2 **Expiration Date:** June 30, 2014-2015 or until all obligations have been satisfactorily fulfilled, whichever occurs first.

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REVISION 2. Clause 2, "Grantee's Duties" is amended as follows:

2. GRANTEE'S DUTIES

Grantee, who is not a State employee, is obligated and expressly agrees to undertake and complete the Project as described in Grantee's Final Application and supplements and correspondence related thereto (on file at the MPCA and incorporated into this Agreement by reference) in the time and manner set forth in the Project Work Plan and Budget (Revised Attachment A) and in accordance with the requirements of this Agreement. The Work Plan and Budget in Revised Attachment A shall, if in conflict with those described in the Grantee's application, supersede those parts of Grantee's application. Grantee shall make no changes in the tasks or schedules set forth in Revised Attachment A without the written consent of the MPCA as provided in Part 16 (Amendments and Change Orders) of this Agreement, as applicable.

REVISION 3. Clause 7, "Authority to Contract" is amended as follows:

7. AUTHORITY TO CONTRACT

To the extent specified in Revised Attachment A, Grantee is authorized to enter into agreements needed to complete the work specified in this Agreement. The MPCA shall be made a third party beneficiary to all such agreements. Before using any contractor other than those specified in Revised Attachment A to complete work specified in this Agreement, Grantee must first obtain the written consent of the State Authorized Representative.

REVISION 4. Clause 8, "Consideration" is amended as follows:

8. CONSIDERATION

The MPCA will pay for all services performed by the Grantee under this Agreement as follows:

8.1 Compensation. The Grantee will be paid according to the breakdown of costs contained in Revised Attachment A, which is attached and incorporated into this Agreement.

8.2 Travel Expenses. Reimbursement for travel and subsistence expenses actually and necessarily incurred by the Grantee as a result of this Agreement will be in the same manner and in no greater amount than provided in the current "Commissioner's Plan" promulgated by the commissioner of Minnesota Management and Budget which is incorporated into this Agreement by reference. The Grantee will not be reimbursed for travel and subsistence expenses incurred outside Minnesota unless it is provided for in Revised Attachment A, or Grantee has received the State's prior written approval for such out of state travel. Minnesota will be considered the home state for determining whether travel is out of state.

8.3 Total Obligation. The total obligation of the State for all compensation and reimbursements to the Grantee under this Agreement will not exceed Eighty Thousand Dollars ($80,000) One Hundred Twenty Thousand Dollars ($120,000).

REVISION 5. Clause 9, "Project Funding and Disbursements" is amended as follows:

9. PROJECT FUNDING AND DISBURSEMENTS

9.1 Condition of Payment. All services provided by the Grantee under this Agreement must be performed to the MPCA's satisfaction, as determined at the sole discretion of the State Authorized Representative and in accordance with all applicable federal, state, and local laws, ordinances, rules, and regulations. The Grantee will not receive payment for work found by the State to be unsatisfactory or performed in violation of federal, state, or local law.
Disbursements shall not be construed as a waiver by the State of any authority it may have to remedy Grantee's noncompliance with this Agreement.

A. The MPCA shall disburse to the Grantee a maximum total of Eighty Thousand Dollars ($80,000) or Seventy-five percent (75%) of the total project costs incurred by the Grantee, whichever is less. Unless the Grantee advises the MPCA to the contrary, in writing, all disbursements by the MPCA shall be made to Grantee at the following address:

Carver County
600 E 4th Street
Chaska, MN 55318
Contact: Marcus Zbinden at 952-361-1806

B. The MPCA shall reimburse the Grantee for only those expenditures incurred during the Term of this Agreement as set forth in Parts 1.1 and 1.2 or at the time of the MPCA approval of the final project report, whichever occurs first. No funds shall be disbursed by the MPCA in the absence of adequate documentation as determined by the MPCA. Grant funds shall be disbursed as follows:

1. The MPCA shall make the first disbursement of funds only after confirming the Grantee's submission of documentation evidencing the commitment of matching funds necessary to fund the entire Project as provided in Part 10.29.2. At that time, the MPCA shall disburse Forty (40) percent of the Grant funds within thirty (30) days after the MPCA approves the documentation; and

2. To be eligible for the second disbursement, the Grantee must submit an Interim Report, inclusive of change orders/amendments, and budget expenditures. The MPCA shall disburse up to an additional Thirty-Five (35) percent of the Grant funds within thirty (30) days after the MPCA approves the Interim Report required in Part 15.2 of this Agreement. Grantee must submit an itemized list of expenditures, and if requested, Grantee must submit receipts for each non-salary expense category which in aggregate is $500 or more. The Interim Report must demonstrate that the monies claimed conform to the Project budget as specified in Revised Attachment A and will not exceed the total Grant award; and

3. To be eligible for final disbursement, the Grantee must submit a Final Report, inclusive of change orders/amendments, budget expenditures, and an Executive Project Summary. The MPCA shall disburse up to the final Twenty-Five (25) percent of the funds within thirty (30) days after the MPCA approves the Final Report and an Executive Project Summary required in Part 15.3 of this Agreement. Grantee must submit an itemized list of expenditures, and if requested, Grantee must submit receipts for each non-salary expense category which in aggregate is $500 or more. The Final Report must demonstrate that the monies claimed conform to the Project budget as specified in Revised Attachment A and will not exceed the total Grant award.

9.2 Grantee Commitment of Financing

A. Grantee shall provide matching funds necessary for the completion of the Project of not less than Twenty One Thousand One Hundred Twenty Four Dollars and Eighty Eight Cents ($21,124.88) or Twenty-Five percent (25%) of the total project costs, whichever is less.

B. Grantee shall ensure that sufficient funding is available to the Project to assure its satisfactory completion. Grantee shall not reduce the monetary amount it has committed to the Project through its own or other funds, as specified in Revised Attachment A, without written consent of the MPCA.

C. Grantee shall bear the sole responsibility for cost overruns in completing this Project.
REVISION 6. Clause 10, "Use of Grant Funds and Repayment of Grant" is amended as follows:

10. USE OF GRANT FUNDS AND REPAYMENT OF GRANT

A. Grantee shall use Grant funds solely for eligible costs, as defined in Minn. Rules Parts 9210.0800 - 9210.0855 and as identified in Revised Attachment A.

B. Grantee shall use Grant funds solely for eligible costs incurred within the term of this Agreement.

C. The MPCA has determined the amount of the Grant award to the Grantee based on the Grantee's estimate of eligible costs. If at the conclusion of the Agreement it is determined that the MPCA's contribution to the Project costs exceeds the percentage of eligible costs specified in Part 10.1A as determined by the State under the provisions of Part 10.A, the Grantee shall promptly return to the MPCA the difference between the disbursed funds and the percentage of eligible costs authorized under this Agreement.

D. Grantee shall reimburse the State, upon demand, for the following:
   1. Any amounts paid by the State for which the Grantee's books, records and other documents are not sufficient to substantiate that those amounts were used by the Grantee to perform the Project.
   2. Any amounts received by Grantee from the State for Project costs which have been inaccurately reported.
   3. Any amounts paid by the Grantee to a Contractor not authorized in writing by the State.
   4. Any amount paid by the State for Project costs which either duplicate costs covered by other specific Grants or Agreements, or costs determined by the State as non-eligible under the provisions of Part 10.A.
   5. Any amount identified as a financial audit exception.

REVISION 7. Clause 11, "Equipment" is amended as follows:

11. EQUIPMENT (if applicable)

The Grantee must use equipment purchased under this Agreement for as long as it is needed for the Project and must not encumber the equipment. If Grantee ceases to use any equipment purchased for the Project under this Agreement during the term of this Agreement, Grantee must sell the equipment for fair market value and reimburse the State seventy-five percent (75%) of the sale proceeds or, if the State's commitment of funding to the Project is less than seventy-five percent (75%) as determined by the amount stated in Part 10.1A, the Project Budget in Revised Attachment A, and any State-approved changes or amendments thereto, reimburse the State the percentage of the sale proceeds that equal the State's commitment of funding to the Project. If the equipment cannot be sold, Grantee must obtain MPCA's prior written approval for appropriate disposition of the equipment.

REVISION 8. Clause 15, "Reporting Requirements" is amended as follows:

15. REPORTING REQUIREMENTS (Revised Attachments B)

All reporting must be provided to the MPCA Authorized Representative. All reports must be electronically submitted and must follow the format of the Continual Tracking Report (Revised Attachment B) which incorporates the approved project Work Plan and Budget (Revised Attachment A). In accordance with Minnesota Session Laws 2009, chap. 37, sec 3, information provided by the Grantee on project expenditures and measurable outcomes will be posted on the MPCA's Web site. Grantees with active Web sites must either post the information on their Web site as well, or make reference to the MPCA Web site.
15.1 Monthly Reports. The Grantee shall, if requested by the MPCA Authorized Representative, provide an oral or written monthly update on the progress of the Project. These requested updates may require such information as tasks accomplished, financial expenditures, and other information deemed necessary by the MPCA Authorized Representative.

15.2 Interim Report (Revised Attachment B). By the date specified in Revised Attachment A, or prior to the second disbursement of funds, whichever occurs first, the Grantee shall prepare an interim report to the satisfaction of the MPCA Authorized Representative summarizing the status of the Project and expenditures to date, including work plan tasks completed, status of timelines, interim results achieved, difficulties encountered in implementing the Project, solutions considered or implemented to resolve those difficulties (Lessons Learned), and any Project Work Plan change orders/amendments.

The Interim Report shall also summarize all expenses incurred to date in completing work plan tasks including labor, equipment, materials, travel and other expenses outlined in Revised Attachment A. The Interim Report shall indicate the actual out-of-pocket cash and in-kind expenditures of the Grantee and the number of hours of labor performed pursuant to this Agreement.

The Interim Report shall not be approved by the MPCA and payment shall not be disbursed unless the report contains the above information to the satisfaction of the MPCA.

15.3 Final Report, Executive Project Summary (Revised Attachments B) and Presentations

1. Final Report. Within thirty (30) days after completion of tasks as specified in Revised Attachment A, Grantee shall submit a final report to the MPCA. The Final Report shall describe, in detail, the history of and conclusions reached from implementing the Project, the technical and economic feasibility of the Project, and the total expenses incurred in implementing the Project.

If the Project is terminated prior to the scheduled completion, the Final Report shall also discuss the conclusions that led to the termination of the Project, results achieved on all tasks completed and recommendations on how these results could be used in future projects.

If the MPCA determines that the information submitted in the Final Report is inadequate, the Grantee shall prepare and submit additional information reasonably requested by the MPCA. The Final Report shall not be approved by the MPCA and final payment shall not be disbursed unless the Report contains the specified information to the satisfaction of the MPCA.

2. Executive Project Summary. At the same time the Final Report is submitted, the Grantee must also submit a summary of the project and its results. This Executive Project Summary will be used in reports and to disseminate information on the outcomes and environmental benefits of the project.

3. Presentations. Upon completion of the Project, if required in Revised Attachment A, the Grantee shall make a minimum of two presentations of the information gained in this Project to appropriate parties. Written notification of each presentation given shall be forwarded to the MPCA. The notification shall include the name of the organization, the information presented and an estimate of the number of people present when the presentation was given.

15.4 Treatment of Data. All data (information) related to this Project and Agreement that is maintained by the MPCA is public unless the Minnesota Data Practices Act, Minn Stat. Ch.13, or other applicable state or federal law provides otherwise. Grantee shall use its best efforts to provide all information required to be submitted to MPCA in a form which can be released as public information. Grantee shall use its best efforts to prepare reports and other information without disclosing trade secret or sales information. If Grantee determines that it must disclose trade

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secret or sales information and Grantee wishes to keep that information from being subject to disclosure under the law, Grantee shall do the following:

1) In its report, Grantee shall segregate all-information Grantee believes to not be subject to disclosure under the law from all other information.

2) Grantee shall submit a written request for the information to be treated as not subject to disclosure under the law, citing the reasons for such treatment. Grantee shall submit the request to the MPCA at the same time it submits the report containing the information in question.

The MPCA shall not consider a request to treat data as not subject to disclosure under the law unless it is made in accordance with the above two requirements. If a request is made in accordance with the above requirements, the MPCA shall promptly determine whether the information qualifies for nonpublic or private data treatment under Minn. Stat. §§ 13.37 and 115A.06. If the MPCA determines that the information may be treated as nonpublic or private data, the MPCA shall use its best efforts to treat the information accordingly.

REVISION 9. Clause 16, “Amendments and Change Orders” is amended as follows:

16. AMENDMENTS and CHANGE ORDERS

16.1 Amendments. Any amendments to this Agreement must be in writing and will not be effective until it has been approved and executed by the same parties, or their successors in office, who approved and executed the original Agreement.

16.2 Change Orders. If the State’s or Grantee’s Authorized Representative identifies minor changes needed in the work plan or budget, either party may initiate a Change Order. The Change Order must be approved by the Grantee and State Authorized Representatives. The State Authorized Representative may approve work plan and line item budget changes in Revised Attachment A if: (1) the Grantee requests the change in a timely manner; (2) good cause exists for the change; (3) the change will not jeopardize the success of the Project or reduce the Grantee’s expenditures to an amount less than the matching amount required by this Agreement; (4) the change will not alter the overall scope of the Project; (5) the change will not increase the amount of the Agreement; and (6) requests for work plan time extensions will not cause or necessitate an extension of the term of this Agreement. Requests for work plan or line item budget changes shall be in writing. Change Orders shall become an integral and enforceable part of this Agreement once approved by the Grantee and State Authorized Representatives.

Except as amended herein, the terms and conditions of the Original Agreement and all previous amendments remain in full force and effect. The Original Agreement and any previous amendments are incorporated into this amendment by reference.
IN TESTIMONY HEREOF, the Carver County and the State Entity have executed this Amendment on the day and date indicated immediately below their respective signatures.

1. STATE ENCUMBRANCE VERIFICATION
   Individual certifies that funds have been encumbered as required by Minn. Stat. §§16A.15 and 16C.05.

   Signed: [Signature]
   Date: [04/17/2013]
   SWIFT Contract No. 52549
   Purchase Order No. 3000005202

2. CARVER COUNTY
   The Grantee certifies that the appropriate person(s) has executed the Agreement on behalf of the Grantee as required by applicable articles, bylaws, resolutions, or ordinances.

   By: [Signature]
   Title: Vice Chair
   Date: [05/21/13]

3. MINNESOTA POLLUTION CONTROL AGENCY
   Individual certifies the applicable provisions of Minn. Stat. §16C.08, subdivisions 2 and 3 are reaffirmed

   By: [Signature] (with delegated authority)
   Title: [Title]
   Date: [26 June 2013]
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GRANT AGREEMENT ATTACHMENTS

REVISED ATTACHMENT A: Project Work Plan and Budget
- Focus Area
- Preferred Proposal
- Goal Statement
- Evaluation Plan/Outcomes
- Objectives and Tasks

REVISED ATTACHMENT B: Reporting
- Continual Tracking Report (Interim and Final)
- Budget Expenditures Report (Interim and Final)
- Change Orders/Amendments (Interim and Final)
- Executive Project Summary (only with Final Report)
Revised ATTACHMENT A

Work Plan and Budget

Project Title: Scientific Evaluation of Contact & Storm Water from the Organics Demonstration Site

Focus Area ID: Source-Separated Compost (Category 1: Communities) - The evolution of compost technology and the co-composting of materials (i.e., food, yard waste, and non-recyclable paper) have resulted in currently unanswered questions such as:
- Is there a need for a pad in the curing area or will a driveable surface over certain soil types and depth to water table be enough to protect the water table below a facility?
- What is the chemical composition of the contact water from the various areas (i.e. the mixing, active (both under the windrows and in between the windrows), curing area) of the compost facility?
- Is there infiltration into the soils in the areas that have a pad vs. those that don’t have a pad? Is there a difference in the infiltration rates?

Preferred project proposal 1D1: Source-Separated Compost - Proposals that address the following two identified research needs: 1) the chemical composition of the contact water and stormwater generated at compost facilities during different composting stages (i.e. tipping/mixing, active, curing), and 2) whether there is any infiltration of contact water to the soils below the mixing, active process to further reduce pathogens (PFRP) and curing areas (post PFRP) of a compost facility and, at a minimum include a literature review related to the two research topics and a proposed method of study that will evaluate the chemical and biological components of stormwater runoff from compost facilities. At a minimum, testing should include: nitrogen, phosphorus, potassium (NPK) panel; measure of the acidity or basictiy of an aqueous solution (pH); metals panels; possible organic chemicals perfluorocarbons (PFC’s), bisphenol A (BPA), other compounds such as phenols and pesticides; pathogens; biological oxygen demand (BOD) and chemical oxygen demand (COD).

Goal Statement: A more comprehensive understanding of environmental impacts of composting operations will allow for expansion of the industry within the state. The data will provide those considering implementing and/or regulating with real data on which to base decisions about environmental impacts.

Project Evaluation Plan and Outcomes: research, testing, and data obtained from this project will provide answers to the unanswered questions identified above. By scientifically answering these questions, the number of source-separated organic compost sites will expand more easily due to less stringent permitting requirements. This project is focused on research and will provide extensive test results detailing the impact composting operations have on the environment. Data will include analysis of contact water, storm water, rain water, soil and composting feedstocks (food waste and yard waste) as well as finished compost. Organic waste that has the potential to be composted accounts for between 27.8% and 37.7% of MSW. Thus expanded access to composting in Minnesota has the potential to divert over 1.4 million tons of waste in Minnesota annually. As the industry expands within the state more organic material will be diverted from landfills and incinerators which will reduce greenhouse gas (GHG) emissions, and reduce air and water pollution (organics diversion goal of 15% by 2030 as set forth in the Metropolitan Solid Waste Management Policy Plan 2010-2030).

Work Plan

Objective 1 of 6 – Literature Review

Task 1A: Work with MPCA to finalize parameters of literature review to ensure it reflects needed research topics.
Timeframe: October 1, 2012 - ongoing
Title of Person(s) Responsible: Project Manager, Staff
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Task 1B: Complete literature review
Title of Person(s) Responsible: Project Manager, Staff

Subtotal Objective 1 Grant funds: $7,416.90 Match: $4,793.04 Total: $12,209.94

Objective 2 of 6 – Work with MPCA to determine new sampling locations and sampling methods at the existing Arboretum Source-Separated Organics Demonstration Compost Site:

Task 2A: Determine new sampling locations and methods
Title of Person(s) Responsible: Project Manager, Staff, MPCA Staff, UMN Staff

Task 2B: Contract with laboratory for chemical and biological analysis of samples as outlined by MPCA requirements:
Timeframe: September 1, 2012 – ongoing
Title of Person(s) Responsible: Project Manager, Staff

Task 2C: Install additional lysimeters Design Lined Sampling Collection Platform
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Subtotal Objective 2 Grant funds: $2,379.04 $3,379.04 Match: $1,420.16 Total: $3,799.20 $4,799.20

Objective 3 of 6 – Rain Simulator and Lined Sampling Collection Pad Installation and Use

Task 3A: Contact UMN for use of rain simulator at UMN Arboretum Compost Site
Timeframe: September 1, 2012 – December 30, 2013
Title of Person(s) Responsible: Project Manager, Staff

Task 3B: Install and maintain Lined Sampling Collection Pad
Timeframe: June 1, 2014 – ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Task 3BC: Install rain simulator and test gauges, supporting equipment
Timeframe: September 1, 2012 - ongoing
Title of Person(s) Responsible: Project Manager, Staff, UMN Staff, Technical Advisor, Site Operator

Task 3GD: Coordinate water supply for simulator with the City of Chanhassen
Timeframe: September 1, 2012 – ongoing
Title of Person(s) Responsible: Project Manager, Staff

Task 3GE: Conduct rain simulation events over active composting and curing piles at 2", 4" and 6" a 100 yr. rain event and collect samples
Timeframe: September 1, 2012 – ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Subtotal Objective 3 Grant funds: $13,955.68 $21,454.28 Match: $3,816.68 Total: $17,772.36 $25,270.96

Objective 4 of 6 – Testing of Soil, Contact Water, Storm Water, Rain Water and Materials at Different Stages of the Composting Process

Task 4A: Determine sampling plan with MPCA and UMN staff
Timeframe: September 1, 2012 - ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator
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Task 4B: Soil Testing at the following MPCA approved locations: tipping/mixing area, active composting area, curing area, and a control location
Timeframe: September 1, 2012 - July 30th, 2012
Title of Person(s) Responsible: Project Manager, Staff, MPCA Staff, UMN Staff

Task 4C: Conduct sampling of materials in the following stages: incoming, actively composting, curing, and finished compost on an MPCA agreed upon schedule at various stages identified by MPCA staff and Carver County staff
Timeframe: September 1, 2012 - ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Task 4D: Sampling of Contact Water (through lysimeters), Rain Water, and Storm Water (through Sheet Flow) by MPCA approved methods and in approved locations on a lined collection pad approved by MPCA
Timeframe: September 1, 2012 - ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Subtotal Objective 4: Grant Funds: $48,968.83 $72,152.87 Match: $6,612.62 Total: $55,581.45 $78,765.49

Objective 5 of 6 – Reporting

Task 5A: Interim Report submitted within 1 year 16 months execution of grant agreement or at 50% completion of the project, whichever occurs first.
Timeframe: September 1, 2013 - January 1, 2014
Title of Person(s) Responsible: Project Manager, Staff

Task 5B: Consolidate and analyze sampling data
Timeframe: September 1, 2012 - ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor

Task 5C: Final Report submitted 1 month prior to end of grant agreement or at 100% completion of the project, whichever occurs first.
Title of Person(s) Responsible: Project Manager, Staff

Subtotal Objective 5: Grant funds: $4,395.20 $5,645.20 Match: $1,242.64 Total: $5,637.84 $6,887.84

Objective 6 of 6 – Dissemination of Information

Task 6A: Meet with MPCA Staff to update on project status and data collected
Timeframe: September 01, 2012 - ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Task 6B: Compile Information for Presentations
Timeframe: September 01, 2013 - ongoing
Title of Person(s) Responsible: Project Manager, Staff

Task 6C: Present Findings through speaking engagements
Timeframe: September 01, 2013 - ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Task 6D: Write peer review article for publication
Timeframe: September 01, 2013 - ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Subtotal Objective 6: Grant funds: $2,884.35 $9,951.71 Match: $3,239.74 Total: $6,124.09 $13,191.45
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Budget

Budget and Expenditures

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<th>Objective 1 Of 6: Literature Review</th>
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<th>Objective 2 Of 6: Work with MPCA to determine new sampling locations and sampling methods at the existing Arboretum Source-Separated Organics Demonstration Compost Site</th>
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<tr>
<td><strong>Task A:</strong> Determine new sampling locations and methods</td>
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<td><strong>Task B:</strong> Contract with laboratory for chemical and biological analysis of samples as outlined by MPCA requirements</td>
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<td><strong>Task C:</strong> Install Additional Isotopes Design Lined Sampling Collection Equipment</td>
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<td>3,798.04</td>
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<table>
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<tr>
<th>Objective 3 Of 6: Rain Simulator and Lined Sampling Collection Pad Installation and Use</th>
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<tr>
<td><strong>Task A:</strong> Contact UMN for use of rain simulator at UMN Arboretum Compost Site</td>
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<td><strong>Task B:</strong> Install and maintain Lined Sampling Collection Pad</td>
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<tr>
<td><strong>Task C:</strong> Coordinate water supply for simulator with the City of Champlin</td>
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<tr>
<td><strong>Task D:</strong> Conduct rain simulation events over active composting and curing piles at 2&quot;, 4&quot;, and 6&quot; a 100 yr. rain event and collect samples</td>
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<th>Objective 4 Of 6: Testing of Soil, Contact Water, Storm-Water, Rain-Water and Materials at Different Stages of the Composting Process</th>
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<tr>
<td><strong>Task A:</strong> Determine sampling plan with MPCA and UMN staff</td>
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<td><strong>Task B:</strong> Soil testing at the following MPCA approved locations: tipping mixing area, active composting area, curing area, and a control location</td>
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<tr>
<td><strong>Task C:</strong> Conduct sampling of materials at the following stages: incoming, actively composting, curing, and finished compost on an MPCA agreed upon schedule at various stages identified by MPCA staff and Carver County staff</td>
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<tr>
<td><strong>Task D:</strong> Sampling of Contact Water (through isotopes), Rain Water, and Storm Water (through sheet flow) by MPCA approved methods and in approved locations on a lined collection pad approved by MPCA</td>
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# AMENDMENT NO. 1 TO GRANT AGREEMENT NO. SWIFT 52549

## Objective 5 Of 6: Reporting

<table>
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<th>Task</th>
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<td>Task A)</td>
<td>Interim Report submitted within 4 years/18 months execution of grant agreement or at 50% completion of the project, whichever occurs first</td>
</tr>
<tr>
<td>Task B)</td>
<td>Consolidate and analyze sampling data</td>
</tr>
<tr>
<td>Task C)</td>
<td>Final Report submitted 1 month prior to end of grant agreement or at 100% completion of project, whichever occurs first</td>
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## Objective 5 Of 6: Dissemination of Information

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<th>Task</th>
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<tbody>
<tr>
<td>Task A)</td>
<td>Meet with MPCA staff to update on project status and data collected</td>
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<tr>
<td>Task B)</td>
<td>Compile Information for Presentations</td>
</tr>
<tr>
<td>Task C)</td>
<td>Present Findings through speaking engagements</td>
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<tr>
<td>Task D)</td>
<td>Write peer review article for publication</td>
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Note: Matching funds listed in the above chart are those from Carver County Project Manager staff only. Significant in-kind matching funds will also come from Specialized Environmental Technologies staff time and equipment use.

## Summarized Budget by Objectives

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<tr>
<th>Objective</th>
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<th>Match In-kind</th>
<th>Total Budget</th>
<th>Expended Previous Periods</th>
<th>Expended This Period</th>
<th>Cumulative Expend. (V + VI)</th>
<th>Budget Balance (IV - VII)</th>
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AMENDMENT NO. 1 TO GRANT AGREEMENT NO. SWIFT 52549

GRANT AGREEMENT

REVISED ATTACHMENT B

CONTINUOUS TRACKING REPORT

(All reports should reflect an ongoing, rolling status update of the project. Never delete previous information, but always add additional information at each phase of progress and always submit electronically.)

[ ] INTERIM REPORT [ ] FINAL REPORT

Project Title: Scientific Evaluation of Contact & Storm Water from the Organics Demonstration Site

Focus Area 1D: Source-Separated Compost (Category 1: Communities) - The evolution of compost technology and the co-composting of materials (i.e., food, yard waste, and non-recyclable paper) have resulted in currently unanswered questions such as:

- Is there a need for a pad in the curing area or will a drivable surface over certain soil types and depth to water table be enough to protect the water table below a facility?
- What is the chemical composition of the contact water from the various areas (i.e., the mixing, active (both under the windrows and in between the windrows) curing area) of the compost facility?
- Is there infiltration into the soils in the areas that have a pad vs. those that don’t have a pad? Is there a difference in the infiltration rates?

Preferred project proposal 1D1: Source-Separated Compost - Proposals that address the following two identified research needs: 1) the chemical composition of the contact water and storm water generated at compost facilities during different composting stages (i.e., tipping/mixing, active, curing), and 2) whether there is any infiltration of contact water to the soils below the mixing, active process to further reduce pathogens (PFRP) and curing areas (post PFRP) of a compost facility and, at a minimum include a literature review related to the two research topics and a proposed method of study that will evaluate the chemical and biological components of stormwater runoff from compost facilities. At a minimum, testing should include: nitrogen, phosphorus, potassium (NPK) panel; measure of the acidity or basicity of an aqueous solution (pH); metals panels; possible organic chemicals perfluorocarbons (PFC’s), bisphenol A (BPA), other compounds such as phenols and pesticides; pathogens; biological oxygen demand (BOD) and chemical oxygen demand (COD).

Goal Statement: A more comprehensive understanding of environmental impacts of composting operations will allow for expansion of the industry within the state. The data will provide those considering implementing and/or regulating with real data on which to base decisions about environmental impacts.

Project Evaluation Plan and Outcomes: research, testing, and data obtained from this project will provide answers to the unanswered questions identified above. By scientifically answering these questions, the number of source-separated organic compost sites will expand more easily due to less stringent permitting requirements. This project is focused on research and will provide extensive test results detailing the impact composting operations have on the environment. Data will include analysis of contact water, storm water, rain water, soil and composting feedstocks (food waste and yard waste) as well as finished compost. Organic waste that has the potential to be composted accounts for between 27.8% and 37.7% of MSW. Thus expanded access to composting in Minnesota has the potential to divert over 1.4 million tons of waste in Minnesota annually. As the industry expands within the state more organic material will be diverted from landfills and incinerators which will reduce greenhouse gas (GHG) emissions, and reduce air and water pollution (organics diversion goal of 15% by 2030 as set forth in the Metropolitan Solid Waste Management Policy Plan 2010-2030).
AMENDMENT NO. 1 TO GRANT AGREEMENT NO. SWIFT 52549

Work Plan Reporting

Objective 1 of 6 – Literature Review

Task 1A: Work with MPCA to finalize parameters of literature review to ensure it reflects needed research topics.
Timeframe: October 1, 2012 - ongoing
Title of Person(s) Responsible: Project Manager, Staff

Task 1B: Complete literature review
Title of Person(s) Responsible: Project Manager, Staff

Objective 1 Estimated Expenditures: Grant funds: $7,416.90 Match: $4,793.04 Total: $12,209.94
Actual Expenditures: EA Grant $_____ Match $_____ Total: _____
Date:__________ Progress Update/Lessons Learned:__________

Objective 2 of 6 – Work with MPCA to determine new sampling locations and sampling methods at the existing Arboretum Source-Separated Organics Demonstration Compost Site.

Task 2A: Determine new sampling locations and methods
Title of Person(s) Responsible: Project Manager, Staff, MPCA Staff, UMN Staff

Task 2B: Contract with laboratory for chemical and biological analysis of samples as outlined by MPCA requirements.
Timeframe: September 1, 2012 – ongoing
Title of Person(s) Responsible: Project Manager, Staff

Task 2C: Install additional lysimeters/Design Lined Sampling Collection Platform
Timeframe: September 1, 2012 – September 15, 2012/May 31, 2014
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Objective 2 Estimated Expenditures: Grant funds: $2,379.04 Match: $1,420.16 Total: $3,799.20 $4,799.20
Actual Expenditures: EA Grant $_____ Match $_____ Total: _____
Date:__________ Progress Update/Lessons Learned:__________

Objective 3 of 6 – Rain Simulator and Lined Sampling Collection Pad Installation and Use

Task 3A: Contact UMN for use of rain simulator at UMN Arboretum Compost Site
Timeframe: September 1, 2012 – December 30, 2013
Title of Person(s) Responsible: Project Manager, Staff

Task 3B: Install and maintain Lined Sampling Collection Pad
Timeframe: June 1, 2014 – ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Task 3BC: Install rain simulator and test-gauges-supporting equipment
Timeframe: September 1, 2012 - ongoing
Title of Person(s) Responsible: Project Manager, Staff, UMN Staff, Technical Advisor, Site Operator

Task 3GD: Coordinate water supply for simulator with the City of Chanhassen
Timeframe: September 1, 2012 – ongoing
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Title of Person(s) Responsible: Project Manager, Staff

Task 3DE: Conduct rain simulation events over active composting and curing piles at 2nd, 4th, and 6th a 100 yr. rain event and collect samples
Timeframe: September 1, 2012 – ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Objective 3 Estimated Expenditures: Grant funds: $13,955.68 $21,454.28 Match: $3,816.68 Total: $17,772.36 $25,270.96
Actual Expenditures: EA Grant $ ________ Match $ ________ Total: ________
Date: ______________ Progress Update/Lessons Learned: __________________________

Objective 4 of 6 – Testing of Soil, Contact Water, Storm Water, Rain Water and Materials at Different Stages of the Composting Process

Task 4A: Determine sampling plan with MPCA and UMN staff
Timeframe: September 1, 2012 - ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Task 4B: Soil Testing at the following MPCA approved locations: tipping/mixing area, active composting area, curing area, and a control location
Timeframe: September 1, 2012 – July 30th, 2012
Title of Person(s) Responsible: Project Manager, Staff, MPCA Staff, UMN Staff

Task 4C: Conduct sampling of materials in the following stages: incoming, actively composting, curing, and finished compost on an MPCA agreed upon schedule at various stages identified by MPCA staff and Carver County staff
Timeframe: September 1, 2012 - ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Task 4DC: Sampling of Contact Water (through lysimeters), Rain Water, and Storm Water (through Sheet Flow) by MPCA-approved methods and in approved locations on a lined collection pad approved by MPCA
Timeframe: September 1, 2012 - ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Objective 4 Estimated Expenditures: Grant Funds: $48,968.83 $72,152.87 Match: $6,612.62 Total: $55,581.45 $78,765.49
Actual Expenditures: EA Grant $ ________ Match $ ________ Total: ________
Date: ______________ Progress Update/Lessons Learned: __________________________

Objective 5 of 6 – Reporting

Task 5A: Interim Report submitted within 1 year 16 months execution of grant agreement or at 50% completion of the project, whichever occurs first
Timeframe: September 1, 2013 – September 1, January 1, 2014
Title of Person(s) Responsible: Project Manager, Staff

Task 5B: Consolidate and analyze sampling data
Timeframe: September 1, 2012 – ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor
AMENDMENT NO. 1 TO GRANT AGREEMENT NO. SWIFT 52549

Task 5C: Final Report submitted 1 month prior to end of grant agreement or at 100% completion of the project, whichever occurs first.
Title of Person(s) Responsible: Project Manager, Staff

Objective 5 Estimated Expenditures: Grant funds: $4,395.20 $5,645.20 Match: $1,242.64 Total: $5,637.84 $6,887.84
Actual Expenditures: EA Grant $ Match $ Total: $%
Date: Progress Update/Lessons Learned:

Objective 6 of 6 – Dissemination of Information

Task 6A: Meet with MPCA Staff to update on project status and data collected
Timeframe: September 01, 2012 – ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Task 6B: Compile Information for Presentations
Timeframe: September 01, 2013 – ongoing
Title of Person(s) Responsible: Project Manager, Staff

Task 6C: Present Findings through speaking engagements
Timeframe: September 01, 2013 – ongoing
Title of Person(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Task 6D: Write peer review article for publication
Timeframe: September 01, 2013 – ongoing
Title of Persons(s) Responsible: Project Manager, Staff, Technical Advisor, Site Operator

Objective 6 Estimated Expenditures: Grant funds: $2,884.35 $9,951.71 Match: $3,239.74 Total: $6,124.09 $13,191.45
Actual Expenditures: EA Grant $ Match $ Total: $
Date: Progress Update/Lessons Learned: 

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**Budget and Expenditures Report**

**Summarized Budget and Expenditures Report by Objectives**

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<th>III.</th>
<th>IV</th>
<th>V</th>
<th>VI.</th>
<th>VII.</th>
<th>VIII.</th>
<th>Budget Balance (IV - VII)</th>
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<tr>
<td><strong>Objective 1 Of 6: Literature Review</strong></td>
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<tr>
<td>Task A) Work with MPCA staff to finalize parameters of literature review to ensure it reflects needed research topics</td>
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<th>VII.</th>
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<th>Budget Balance (IV - VII)</th>
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<tbody>
<tr>
<td><strong>Objective 2 Of 6: Work with MPCA to determine new sampling locations and methods at the existing Arboretum Source-Separated Organics Demonstration Compost Site</strong></td>
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<td>Task A) Determine new sampling locations and methods</td>
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<td>Task B) Contract with laboratory for chemical and biological analysis of samples as outlined by MPCA requirements</td>
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<td>Task C) Install Additional lysimeters/Design Lined Sampling Collection Platform</td>
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<td><strong>Objective 2 - Total</strong></td>
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<th>VII.</th>
<th>VIII.</th>
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<tr>
<td><strong>Objective 3 Of 6: Rain Simulator and Lined Sampling Collection Pad Installation and Use</strong></td>
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<tr>
<td>Task A) Contact UMN for use of rain simulator at UMN Arboretum Compost Site</td>
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<td>Task B) Install and maintain Lined Sampling Collection Pad</td>
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<td>Task C) Coordinate water supply for simulator with the City of Chanhassen</td>
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<tr>
<td>Task D) Conduct rain simulation events over active composting and curing piles at 2'-8', 4'-8', and 6'-8' a 100 yr. rain event and collect samples</td>
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<th>VIII.</th>
<th>Budget Balance (IV - VII)</th>
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<tr>
<td><strong>Objective 4 Of 6: Testing of Soil, Contact Water, Storm Water, Rain Water and Materials at Different Stages of the Composting Process</strong></td>
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<tr>
<td>Task A) Determine sampling plan with MPCA and UMN Staff</td>
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<tr>
<td>Task B) Soil Testing at the following MPCA approved locations - tipping/mixing area, active composting area, curing area, and a control location</td>
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<tr>
<td>Task C) Conduct sampling of materials at the following stages - incoming, actively composting, curing, and finished compost on an MPCA-agreed-upon schedule at various stages identified by MPCA staff and Chanhassen County staff</td>
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<tr>
<td>Task D) Sampling of Contact Water (through lysimeters), Storm Water (through sheet flow) by MPCA-approved methods and in approved locations on a lined collection pad approved by MPCA</td>
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<td><strong>Objective 4 - Total</strong></td>
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CR # 6073 | EA # 1750 | SWIFT # 52549
AMENDMENT NO. 1 TO GRANT AGREEMENT NO. SWIFT 52549

**Objective 5 Of 6: Reporting**

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<th>Project Manager</th>
<th>Rate</th>
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<th>Total</th>
<th>Site Operator</th>
<th>Rate</th>
<th>Hours</th>
<th>Total</th>
<th>Objective 5 - Total</th>
<th>Rate</th>
<th>Hours</th>
<th>Total</th>
<th>Objective 6 - Total</th>
<th>Rate</th>
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**Objective 6 Of 6: Dissemination of Information**

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<th>Technical Advisor</th>
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*Note: Matching funds listed in the above chart are those from Carver County Project Manager staff only. Significant in-kind matching funds will also come from Specialized Environmental Technologies staff time and equipment use.*

**Summarized Budget by Objectives**

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<tr>
<th>Objective 1 - Total</th>
<th>Grant Funds</th>
<th>Match Cash</th>
<th>Match In-kind</th>
<th>Total Budget</th>
<th>Expended Previous Periods</th>
<th>Expended This Period</th>
<th>Cumulative Expend. (V+V)</th>
<th>Budget Balance (IV - VII)</th>
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<th>Budget Balance (IV - VII)</th>
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<th>Match Cash</th>
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<th>Total Budget</th>
<th>Expended Previous Periods</th>
<th>Expended This Period</th>
<th>Cumulative Expend. (V+V)</th>
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<th>Match In-kind</th>
<th>Total Budget</th>
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<th>Cumulative Expend. (V+V)</th>
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<th>Total Budget</th>
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<th>Expended This Period</th>
<th>Cumulative Expend. (V+V)</th>
<th>Budget Balance (IV - VII)</th>
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<th>Objective 6 - Total</th>
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<th>Total Budget</th>
<th>Expended Previous Periods</th>
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<th>Cumulative Expend. (V+V)</th>
<th>Budget Balance (IV - VII)</th>
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<tr>
<td>2,884.35</td>
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<th>Expended Previous Periods</th>
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AMENDMENT NO. 1 TO GRANT AGREEMENT NO. SWIFT 52549

GRANT AGREEMENT

REVISED ATTACHMENT B (continued)

Change Orders/Amendments

[ ] No, there have been no formal or informal changes/amendments to the Agreement or the Project Work Plan and Budget as outlined in Attachment A.

[ ] Yes, there have been formal and/or informal changes/amendments to the Agreement and/or the Project Work Plan and Budget as outlined in Attachment A.

If yes, complete the following record of change orders/amendments. In addition to being electronically submitted as part of the Report, this page must be signed and faxed (651/215-0246) or mailed to the MPCA Authorized Representative.

<table>
<thead>
<tr>
<th>#</th>
<th>Date Requested</th>
<th>Requested By</th>
<th>Date Approved</th>
<th>Approved By</th>
<th>Objective Impacted</th>
<th>Description of and Reason for the change/amendment</th>
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SIGNATURES:
The signatures below authorized the Grantee to proceed with the items identified above:

Grantee’s Authorized Representative: ___________________________ Date __________

MPCA’s Authorized Representative: ___________________________ Date __________

Any major change to the Agreement (i.e., project scope, timeline beyond Agreement expiration date, etc.) must be requested and executed as a formal Amendment (requiring execution by all parties). Formal Amendments are prepared for processing by the MPCA’s Authorized Representative and must be executed prior to implementation of requested changes.
Section I: Grantee Contact Information

Grantee/Organization Name: Carver County (Environmental Services)
Mailing address: 600 E 4th Street
City: Chaska  State: MN  Zip Code: 55318
Contact name: Marcus Zbinden  Title: Environmental Specialist III
E-mail: mzbinden@co.carver.mn.us  Telephone: 952-361-1806
Fax: 952-361-1828  Grantee's Web site: www.co.carver.mn.us  Legislative House District: 34B

Section II: Project Information

Project ID#: Title: Scientific Evaluation of Contact & Storm Water from the Organics Demonstration Site
Brief Project description: In order to scientifically address questions related to compost technology and co-composted material, this project will serve to continue and expand research at the University of Minnesota Landscape Arboretum demonstration site — conducting more expansive testing on feedstocks, compost in various stages of decomposition, contact water, rainwater, and storm water. In addition, a literature review will be completed to assess chemical and biological components of storm water from compost facilities.

Grant Awarded: $80,000.00  $120,000.00  Matching funds/value of In-Kind: $  Total Project Cost: $

Section III: Summary of Project Objectives and Results
Minnesota Pollution Control Agency

Notice of Request for Proposals (RFP)

Fiscal Years 2012-13 Environmental Assistance Grants

May 14, 2012

The Minnesota Pollution Control Agency (MPCA) is issuing this Request for Proposals (RFP) to solicit projects for the Fiscal Years (FY) 2012-13 Environmental Assistance (EA) Grant Program.

Applications for financial assistance will be accepted from May 14, 2012, through 2:00 p.m. Central Time June 14, 2012, for proposals in the following three (3) categories:

1) Category 1: Communities (Focus Areas: A) Green Building; B) Local Government Assistance - Sustainability Measures, C) Polycyclic Aromatic Hydrocarbons (PAHs) Contaminated Stormwater Pond Sediment, D) Source-Separated Compost, and E) Environmental Volunteering and Service Learning)


3) Category 3: Schools (Focus Areas: A) Schools Reduce/Reuse/Recycle, and B) Secondary and Post-Secondary Education Curriculum)

Approximately $640,000 is available for EA grant awards to encourage outcome-oriented, economically-driven approaches to pollution prevention, waste reduction, toxicity reduction, water quality protection, and resource conservation. Eligible applicants grant award amounts, and minimum matching fund requirements will vary by focus areas and preferred proposals. The FY 2012-13 EA Grant Program RFP provides detailed information on requirements and the process by which applicants may apply for a grant. The RFP is available on the MPCA’s website (http://www.pca.state.mn.us/grants/index.html). This webpage also provides downloadable application forms and links to applicable statutes and rules.
Request for Proposals
Funding Guidance

FY 2012-13 Environmental Assistance Grant Program
May 14, 2012 to June 14, 2012

I. Introduction
The Environmental Assistance (EA) Grant Program was established under Minn. Stat. § 115A.0716 and is administered by the Minnesota Pollution Control Agency (MPCA) under Minn. R. 9210.0800 to 9210.0845. The purpose of the EA Grant Program is to provide financial assistance for the development of environmentally sustainable practices in Minnesota through voluntary partnerships and goal-oriented, economically-driven approaches to pollution prevention and resource conservation.

The Fiscal Years (FY) 2012-13 EA Grant Program theme is “Minnesota Living and Working Green.” The MPCA has approximately $440,000 available for grant awards. Funding for this grant round comes from the Environmental Fund and the Clean Water Fund. The EA grant round is a competitive application process. The MPCA will select those proposals that best meet the environmental outcomes defined in this Request for Proposals (RFP) within funding limitations. Focus areas and preferred proposals are discussed in greater detail in Part II. The MPCA invites eligible applicants to submit grant proposals in the following categories and focus areas:

FY 2012-13 Categories and Focus Areas
   o Category 1: Communities
   o Category 2: Businesses
   o Category 3: Schools
     * Focus Areas: A) Schools Reduce/Reuse/Recycle, and B) Secondary and Post-Secondary Education Curriculum.

II. Eligibility, Funding Levels, and Preferred Categories

Eligible applicants
For the FY2012-13 EA Grant Program, eligible applicants include Minnesota residents, organizations, businesses, institutions, and political subdivisions of the state, but not the MPCA (Minn. R. 9210.0810, Subpart 2.B). Eligibility may be further defined by focus area and/or preferred proposal (see Eligible proposals).

Funding levels
The maximum grant award and matching funds requirement vary and are specified for each preferred proposal. In most cases, the applicant must provide a funding percentage match of the Total Project Cost. The match may be in the form of in-kind services or cash. In all cases, the match cannot be services or funds derived from other grant sources administered by the MPCA or from other Minnesota State agencies or departments.

Eligible proposals
Eligible proposals are those that will best address the need identified for the specified category and its corresponding focus areas and preferred proposals. Applications that reflect a preferred proposal will receive priority consideration during the application review process. Applicants must select the most appropriate category and focus area for their proposals. Submittal of the same proposal by an applicant to multiple focus areas will be cause for rejection of all such submittals from that applicant.
The MPCA may also consider proposals other than the identified preferred proposals if the MPCA deems the proposal "time sensitive" and furthering the Agency’s mission of working with Minnesotans to protect, conserve, and improve our environment and enhance our quality of life. Potential applicants may request consideration of their proposals as time-sensitive if: 1) the grant request is less than $10,000; 2) the applicant can demonstrate why it cannot reasonably abide by the FY 2012-13 EA Grant process and timelines; and 3) the time-sensitive application/request is electronically submitted to grants-loans.pca@state.mn.us by the 2:00 p.m., June 14, 2012, deadline.

Please be advised that some proposals (i.e., construction, excavation, etc.) will be subject to the hours of employment and wage rate provisions of Minnesota Statutes §§177.41-177.44 and Minnesota Rules parts 5200.1000-5200.1120. To obtain specific wage rates, you must contact the Minnesota Department of Labor and Industry, Prevailing Wage Section, 443 Lafayette Road North, St. Paul, MN 55155, DL1.PrevWage@state.mn.us or (651) 284-5091.

Category 1: Communities

Focus Area 1A. Green Building: Lack of public information about the environmental performance of buildings is a key barrier to greater adoption of practices and improvements that will reduce the air emissions, water quality impacts, and waste generation of the built environment. The compiling and dissemination of such information will further the adoption of green building practices. Applicants are encouraged to involve major stakeholders as partners in the proposal.

- Preferred proposals:
  1) Implement disclosure or labeling of energy efficiency and/or other green practices and certifications for existing Minnesota buildings. Use one or more approaches including: residential multiple listing services, commercial real estate market, truth-in-housing, municipal policies/ordinances. (Maximum grant amount of $45,000; minimum 25 percent match required)
  2) Compile actual performance data for Minnesota buildings designed, constructed and/or operated using green building guidelines, standards, rating systems, or codes. At a minimum, include energy usage, greenhouse gas (GHG) emissions, water usage, and waste generation. Compare with recognized benchmarks. (Maximum grant amount of $20,000; minimum 25 percent match required)

Focus Area 1B. Local Government Assistance - Sustainability Measures: Transparency and accountability to community members about city sustainability fits well with educating and engaging community members as partners in envisioning and building a more sustainable city. What's measured matters. Or put another way: if it matters, measure and report it. The MPCA seeks proposals that refine/implement a measurement tool for cities that documents sustainability metrics/indicators that reflect accomplishment of multiple city goals, programs and projects, including GreenStep best practices and comprehensive plan goals.

- Preferred proposals:
  - Work with several Minnesota cities to apply a measurement tool/process for a suite of sustainability metrics/indicators that reflect progress on implementation of multiple GreenStep City best practices. Proposals must include: collecting at least two years of data for each participating city; developing and using a web display template; training city participants in continued data gathering/reporting for continuing use by cities at minimal or no cost; showing how data can support subsequent analyses, planning and policy decisions at the local level; and indicating how other cities can adopt and benefit from the tool. (Maximum grant amount of $45,000; minimum 25 percent match required)

Focus Area 1C. Polycyclic Aromatic Hydrocarbons (PAHs) Contaminated Stormwater Pond Sediment: the Legislature appropriated funding for grants to municipalities for implementation of best management practices in treating or cleaning up contaminated sediments in stormwater ponds or other waters of the state (Minnesota Session Laws 2009, Chapter 172, Article 2, Section 4, and Minnesota Session Laws 2010, Chapter 361, Article 2, Section 4).

PAHs can be harmful to human health and are classified as carcinogenic by the United States Environmental Protection Agency (EPA). These chemicals are known to accumulate in the sediments of stormwater ponds. To protect human health and the environment, assistance is being provided to Minnesota municipalities implementing best practices in the treating or cleaning up PAH contaminated sediments in stormwater ponds or other waters of the state (Minnesota Session Laws 2009, Chapter 172, Article 2, Section 4, and Minnesota Session Laws 2010, Chapter 361, Article 2, Section 4).

- Preferred proposals:
  1) Removal and management of stormwater pond sediments contaminated with PAHs. (Maximum grant amount of $100,000; minimum 50 percent match from non-state funding sources required)

Approximately $187,000 is available for grant awards. Eligible applicants are limited to municipalities that have adopted ordinances for the restricted use of undiluted coal tar sealants. Grant funds are specifically designated for eligible transportation and disposal costs. Please be advised that Focus Area 1C proposals are subject to the hours of
employment and wage rate provisions of Minnesota Statutes §§177.41-177.44 and Minnesota Rules parts 5200.1000-5200.1120. To obtain specific wage rates, you must contact the Minnesota Department of Labor and Industry, Prevailing Wage Section, 443 Lafayette Road North, St. Paul, MN 55155, DLW.PrevWage@state.mn.us or (651) 284-5091.

**Focus Area 1D. Source-Separated Compost:** The evolution of compost technology and the co-composting of materials (i.e., food, yard waste, and non-recyclable paper) have resulted in currently unanswered questions such as:

- Is there a need for a pad in the curing area or will a drivable surface over certain soil types and depth to water table be enough to protect the water table below a facility?
- What is the chemical composition of the contact water from the various areas (i.e. the mixing, active (both under the windrows and in between the windrows), curing area) of the compost facility?
- Is there infiltration into the soils in the areas that have a pad vs. those that don’t have a pad? Is there a difference in the infiltration rates?

To scientifically answer these questions, two research areas have been identified: 1) the chemical composition of the contact water and stormwater generated at compost facilities during different composting stages (i.e. tipping/mixing, active, curing), and 2) whether there is any infiltration of contact water to the soils below the mixing, active process to further reduce pathogens (PFRP) and curing areas (post PFRP) of a compost facility. Approximately $80,000 is available for grant awards.

- **Preferred proposals:**
  1) Proposals should address the above two research needs and, at a minimum include a literature review related to the two research topics and a proposed method of study that will evaluate the chemical and biological components of stormwater runoff from compost facilities. At a minimum, testing should include: nitrogen, phosphorus, potassium (NPK) panel; measure of the acidity or basicity of an aqueous solution (pH); metals panels; possible organic chemicals perfluorocarbons (PFC's), bisphenol A (BPA), other compounds such as phenols and pesticides; pathogens; biological oxygen demand (BOD) and chemical oxygen demand (COD).
  2) The general parameters of the study should at, a minimum, include:
     - Feedstock: food & yard waste and non-recyclable paper and untreated wood waste.
     - Feedstock Specifications: approximate composition of food waste/non-recyclable paper/compostable plastics to yard waste/wood waste for the proper carbon to nitrogen carbon to nitrogen (C:N) ratio. Compostable Plastics should be Biodegradable Products Institute (BPI) certified.
     - A rain simulator would be used to mitigate any possible drought situations.
     - Rain simulation events might be 1", 2" and 4". Possibly a 6"/24hrs as it is a 100-year storm event.
     - Baseline soils testing in the mixing, active and curing areas of the compost facility, then soil testing on an MPCA agreed on schedule.
     - Each analysis should include samples from lysimeters that will best characterize the separate stages of compost process and contact and surface run-off (sheet flow) from each stage. The number of sampling event would be agreed upon in the final MPCA approved work plan.
     - Analysis of the compost material that the water is sampled from.

  (Maximum grant amount of $80,000.00; minimum 25 percent match required)

**Focus Area 1E. Environmental Volunteering and Service Learning:** Volunteering and Service Learning enterprises that partner with similar organizations (i.e., education districts, local governmental units, state agencies, and non-profit organizations) create strategic partnerships to collaboratively meet a defined environmental outcome. Applicants should identify one lead entity to manage and coordinate the proposal. Applications should include development of replicable models to catalyze and support residents and/or students to volunteer their time within their communities and/or take voluntary action on a personal level, to protect and improve environmental quality.

- **Preferred proposals:**
  1) Development of volunteer and service learning programs related to:
     - Protecting and improving water quality through low impact development (LID) stormwater best practices;
     - Improving ambient air quality through non-motorized transportation and recreational fire education and outreach; or
     - Conserving energy and water resources.

  (Maximum grant amount of $40,000; minimum 25 percent match required)
Category 2: Businesses

Focus Area 2A. Green Chemistry: Green chemistry and design is formulating or designing a new product (or reformulating or redesigning an existing one) to reduce environmental, workplace, and human health impacts over the product’s entire life-cycle. Product life cycle includes design, production of material and energy inputs, production, end use, end-of-life recovery, and all packaging and transportation between these steps. Green Chemistry focuses on implementing proposals that demonstrate how green chemistry and engineering practices in design and manufacture of products can reduce reliance on toxic chemicals such as those identified as Priority Chemicals by the Minnesota Department of Health. Preliminary research is often needed to identify how Priority Chemicals are used by businesses or suppliers so that alternative options can be identified and then demonstrated. Proposals may focus on a particular business’ products, on a sector of businesses, and/or in partnership with businesses focusing on their suppliers.

- Preferred proposals (may include one or more of the following):
  1) Research for selected Priority Chemicals or Chemicals of High Concern (list developed by MN Dept of Health, [http://www.health.state.mn.us/divs/eh/hazardous/topics/toxfreekids/index.html](http://www.health.state.mn.us/divs/eh/hazardous/topics/toxfreekids/index.html)) to identify uses by business sectors and companies, and alternatives to using listed chemicals. (Maximum grant amount of $15,000; minimum 25 percent match required)
  2) Demonstration of the use of green chemistry and engineering practices in design and manufacture of products. (Maximum grant amount of $30,000; minimum 25 percent match required)
  3) Proposals enabling manufacturers to promote green chemistry and engineering product design with their suppliers. (Maximum grant amount of $15,000; minimum 25 percent match required)

Focus Area 2B. Reduce/Reuse/Recycle: Source reduction and reusing materials significantly reduces the need for new materials to be extracted, processed, designed, manufactured, transported, used and disposed of at end of life. By reducing these needs a considerable amount of valuable resources are saved. This grant area focuses on three areas - reuse, repair and rentals that replace the need for a new item to be purchased. The objectives are to increase the purchase of repair services and reused items in place of new, to facilitate direct transactions of reusable materials and rentals, and to create new opportunities for materials to be donated and reused in Minnesota. The outcomes will include pounds of reused/rented/repaird materials sold or exchanged, number of reuse/rental/repair transactions as a result of new partnerships, and pounds of increased donations of reused materials.

- Preferred proposals:
  1) Proposals that will increase the beneficial economic and environmental outcomes of reuse in Minnesota. Proposals could include facilitating more reuse transactions between reuse organizations and/or citizens, documenting the environmental impact of reuse, and/or developing business-to-business or public/private partnerships between reuse/repair/rental organizations. (Maximum grant amount of $50,000; minimum 25 percent match required)

Focus Area 2C. Environmental Business Development: Eco-Industrial Parks are industrial developments which simultaneously meets high economic, environmental, and social goals (sustainable economic development). This concept involves the principles of industrial ecology - designing businesses and groups of businesses as if they were a series of interlocking ecosystems which interface benignly with the local ecosystem. Industrial ecology takes the pattern of the natural environment as a model for solving environmental problems and creating the most efficient industrial processes. Proposals should create sustainable systems and processes to encourage conservation of resources and a healthy environment.

- Preferred proposals:
  1) Plan and/or demonstrate industrial ecology that involves eco-industrial parks, industrial symbiosis and other types of eco-industrial developments by local governmental units or development organizations. [Click here](#) for more information on eco-industrial parks. (Maximum grant amount of $50,000; minimum 25 percent match required)

Focus Area 2D. Electronic Waste (e-Waste) Collection: Residents often purchase electronics at retail locations and would like to recycle their used e-waste at the same time. In order to expand convenient low/no cost collection opportunities for Minnesota residents in the underserved areas, proposals should provide/increase e-Waste collection opportunities outside of the 11-county metro area (areas outside of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright counties). E-Waste includes, but is not limited to: televisions, computers, computer monitors, or other covered electronic devices as described in the Minnesota Electronic Waste Recycling Act (Minn. Stat. §§ 115A.1310 to 115A.1330). Eligible applicants are retailers with locations in the non-metro area. Eligible capital costs (i.e., structures and equipment) are limited to not more than ten percent (10%) of the project costs without prior MPCA approval. Approximately $135,000 is available for grant award(s). Please be advised that "construction" projects are subject to the hours of employment and wage rate provisions of Minnesota Statutes §§177.41-177.44 and Minnesota Rules parts
S200.1000-S200.1120. To obtain specific wage rates, you must contact the Minnesota Department of Labor and Industry, Prevailing Wage Section, 443 Lafayette Road North, St. Paul, MN 55155, DLI. PrevWage@state.mn.us or (651) 284-5091.

- Preferred proposals:
  1) Implementation of e-Waste collection program by retailers with locations in the non-metro area, which could include a consortium of retailers, who are currently not registered with the MN e-waste program. The retailer(s) would create a contract with recyclers registered with the MN e-waste program: http://www.pca.state.mn.us/bkzq753, and then the retailers would register as collectors before beginning collection. Preference would be for at least 12 retail locations that are spread throughout the non-metro area. (Maximum grant amount of $135,000; minimum 25 percent match required)

Focus Area 2E: Statewide Compost Organizations: Minnesota’s composting industry currently does not have a trade organization focused on advancing and supporting the industry. This focus area will provide funds for the establishment of such an organization to better position the industry to: share best practices, develop education and outreach programs, conduct research, advocate for industry concerns, provide training, and meet other industry needs.

- Preferred proposals:
  1) Proposals to establish or expand a statewide trade organization that supports the composting industry. Eligible expenses could include, but are not limited to: staff, time, legal services, staff up costs, staff term (1-2 years) operating expenses. (Maximum grant amount of $15,000; minimum 25 percent match required)

Category 3: Schools

Focus Area 3A. Schools Reduce/Reuse/Recycle: Minnesota’s public Kindergarten-12 (K-12) schools generate an estimated 483,520 pounds of waste every school day. Analysis of school waste composition suggests that much of that waste could be reduced, and over 75% of it could be recycled or composted. Proposals should implement practices that reduce waste and improve recycling and composting, conserves resources, saves energy and reduces greenhouse gas emissions.

- Preferred proposals:
  1) Proposals which implement sustainable best practices for waste prevention, recycling and food waste diversion at multiple K-12 schools. Proposals must be designed to produce measurable outcomes that are implemented and replicated at multiple facilities throughout a school district or through multiple districts. Outcomes should result in decreases in overall waste generated or in increased recycling or food waste recovery rates. Grant funded activities may include, but are not limited to:
    a. Providing technical assistance to schools resulting in implementation of best practices.
    b. Developing and implementing curriculum and class lesson plans explaining waste prevention and recycling concepts that meet state standards.
    c. Purchasing and installing bins and signage.
    d. Incorporating new responsibilities into a position description and training district staff to act as a recycling coordinator.
    e. Implementing a food waste recycling program.
    f. Implementing new practices designed to decrease waste generation such as: using reusable dishware, implementing food waste reduction practices, reducing junk mail and/or office paper waste.
    g. Conducting a cost and benefits analysis of recycling and/or food waste diversion programs. (Maximum grant amount of $60,000; no minimum match required)

Focus Area 3B. Secondary and Post-Secondary Education Curriculum: Leaders across Minnesota government, academia, and business are pursuing reformulation of existing products and design of new products using the principles of green chemistry and green engineering. Equally important are strategies to raise awareness among the product designers of the future - today’s secondary and post-secondary students of the toxicological and life-cycle impacts of chemical use choices on humans and the environment. Proposals should support the development of green chemistry and design curricula at secondary and post-secondary institutions in Minnesota and strengthen the Minnesota and national green chemistry and design teaching network through dissemination of new curricula.

- Preferred proposals:
  1) Green Chemistry curriculum development and implementation at secondary and post-secondary education institutions. (Maximum grant amount of $15,000; no minimum match required)

Ineligible proposals (unless specified otherwise per focus area and/or preferred proposal)

- Proposals seeking funding for general operating expenses.
- Proposals for environmental compliance remediation.
- Proposals limited to individual benefit, a non-innovative local benefit, or do not have a broad community impact.
Proposals that do not meet the eligible specifications identified in the FY 2012-13 EA Grant RFP.

Ineligible costs (unless specified otherwise per focus area and/or preferred proposal). Ineligible costs may not count toward the required matching funds percentage unless stated otherwise below.

- The cost of preparing the grant application.
- The cost of activities initiated and costs incurred prior to execution of the grant agreement.
- The cost of general operating support such as routine overhead expenses not related to the grant proposal.
- The cost of environmental compliance remediation.
- The purchase of real property (land, real estate, and buildings), easements, and/or vehicles. However, if not incurred prior to execution of a grant agreement, such costs may count toward the required percentage match.
- The cost of equipment, except as determined on a case-by-case basis. However, if not incurred prior to execution of a grant agreement, such costs may count toward the required percentage match.
- The cost of obtaining any required permits from the MPCA. However, if not incurred prior to execution of a grant agreement, such costs may count toward the required percentage match.
- The cost of interim and final reporting. However, if incurred within the grant agreement budget period, such costs may count toward the required percentage match.
- The cost of any of the following: fund raising; lobbying, lobbyists, and political contributions; entertainment/gifts; and bad debt, late payment fees and finance charges.

III. Application Timeline and Process

During the application process, applicants must follow the identified submittal formats and meet the specified deadlines. Applicants are to select the most appropriate focus area for their proposal. Submittal by an applicant to multiple focus areas for the same proposal will be cause for rejection of all such submittals from that applicant. Applications must be submitted by 2:00 p.m. Central Time on June 14, 2012. Applications must be electronically submitted to grants-loans.pca@state.mn.us. Applications that are late, faxed, submitted in non-Word format, or sent directly to MPCA staff will not be accepted for consideration. The only documents accepted as faxes or in portable document file (PDF) format are supporting and signature documents, such as board resolutions, letters of support, and letters of secured matching funds.

FY 2012-13 application timelines

- **June 14, 2012**: Application Deadline - applications are due by 2:00 p.m. Central Time.
- **July 13, 2012**: estimated date that applicants will be notified whether they are selected for a grant award offer (this date subject to change). Award offers are contingent on MPCA approval of applicant’s final work plan and execution of a grant agreement.

Awarded applicants will be required to provide their tax identification information (federal and state, or if applicable, social security number), attain MPCA approval of their proposed work plan, and execute a grant agreement with the MPCA by August 31, 2012. If a Grant Agreement is not completed by August 31, 2012, the MPCA reserves the right to withdraw the award offer. No grant disbursements will occur prior to MPCA execution of the necessary grant agreements.

Nonpublic data

The intent of publicly-funded proposals is to make information developed through the grants available to the public. All information submitted to the MPCA, as part of this application process, will be public at the completion of the evaluation and award process. Applicants may request that certain information from the applications be designated nonpublic or private. For more information on the process to have certain information designated as nonpublic or private, please contact Chris Malec prior to application submittal at chris.malec@state.mn.us or 651-757-2548 or 800-657-3864.

Grant award offer

Grant award offers will be made based on MPCA's review of the applications for eligibility and measurable outcomes and on the availability of funding. Award offers will also be contingent on the applicant's attainment of an MPCA approved work plan and completion of the execution of a grant agreement within the specified timeframes. If an agreement is not executed within the specified timeframe, the award offer is subject to withdrawal.

In addition to its authority to offer reduced grant awards, the MPCA reserves the right to refrain from awarding any grants in the event that no program funding is made available. If the MPCA concludes that no proposal has sufficient potential to implement the desired focus area environmental assistance in Minnesota, the MPCA shall not award any grants and may then reinitiate the process for awarding grants.
Grant agreement
The recipients of grant award offers must formally enter into grant agreements with the MPCA. The grant agreement is a legal, binding document requiring several signatures for execution. Prior to execution of a grant agreement, the applicant must provide tax identification information, documentation of secured matching funds, and, if governed by a Board, a resolution committing to the proposal and authorizing signature for the grant agreement.

The grant agreement addresses the terms and conditions of the grant award, including project budget period and implementation, disbursement of grant funds, and reporting requirements. The approved project work plan and budget will be incorporated into and made part of the grant agreement. The maximum length of the project budget period will vary based on focus areas. If the project extends beyond one year, an Interim and Final report will be required. If the project budget period is one year or less, only a Final report will be required. As part of the reporting process that will be outlined in the grant agreement, grantee expenditure information and measurable outcomes from implementation of grants awarded under this RFP will be posted on the MPCA’s Web site in accordance with Minnesota Session Laws 2009, chap. 37, sec. 3.

IV. Review and Evaluation Process

Eligible applications will be evaluated to determine the proposals that best meet the stated outcomes in each focus area and preferred proposal. Proposals that are reflective of the “Preferred Proposals” identified under each focus area will receive priority consideration during the application review process.

Applicants are to select the most appropriate focus area for their proposal and to use the corresponding application form provided. Submission by an applicant to multiple focus areas for the same proposal will be cause for rejection of all such submittals from that applicant.

In completing the appropriate application, please ensure that all items are addressed. There is no page limit restricting the amount of information that you may wish to provide, however, unless requested to submit actual supporting documentation, the preference is that reference be made that such documentation is available by request. If in doubt about submitting certain documents, please contact Mary Baker (mary.baker@state.mn.us or 651/757-2208 or 1-800-557-3864).

Evaluation criteria for applications

Eligible applications will be evaluated by MPCA staff review team(s), and if necessary, outside sources for technical review. Evaluation criteria will vary per focus area. However, the evaluation of all eligible applications will include the following criteria as well as any additional criteria reflected in the individual focus area application forms. Ultimate selection of proposals for grant award is the MPCA’s determination of proposals having measurable outcomes relative to the identified FY 2012-13 focus areas.

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<thead>
<tr>
<th>Criteria</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>1. Preferred Proposal for identified Focus Area</td>
<td>20%</td>
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<td>2. Anticipated and measurable outcomes; likelihood of achieving anticipated outcomes</td>
<td>20%</td>
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<td>3. Assets and resources available to the applicant to implement the proposal</td>
<td>15%</td>
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<td>4. Cost effectiveness of proposal</td>
<td>10%</td>
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<td>5. Applicability of the proposal and future dissemination of results to other persons or organizations in Minnesota; use of innovative technologies, methods, or techniques</td>
<td>10%</td>
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<td>6. Qualifications and, if applicable, past performance of the applicant and/or individuals who will perform the work described in the proposal</td>
<td>10%</td>
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<td>7. Other criteria specific to the selected Focus Area and/or preferred proposal as noted on applicable application form)</td>
<td>15%</td>
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<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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V. Instructions for Completing the Application

Except for Focus Area 1C, PAHs Contaminated Stormwater Pond Sediment proposals, Applicants are to complete the Environmental Assistance Standard Grant Application form for their proposal. Instructions for completion of the application are provided on each application form. Focus Area 1C Applicants are to use the PAH Contaminated Stormwater Pond Sediment Application form.

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Important reminders

- Submittal by an applicant to multiple focus areas for the same proposal will be cause for rejection of all such submittals from that applicant.

- Proposals that reflect the "Preferred Proposals" identified under each Focus Area will receive priority consideration during the application review process.

- Although there is no page limit restricting the amount of information that can be provided, please do not submit unsolicited, extensive, or excessive supporting documentation (i.e., audit/financial reports, bond ratings, more than three letters of support) unless requested. The preference is that such information be provided in a summary/list format with reference being made to the availability of the actual documents/documentation by request.

- For those documents requiring signature (resolutions, letters of support, letters of secured funds), preference is that they be scanned and submitted electronically. However, "signature documents" may also be faxed or mailed through the postal system. For those signature documents that must be faxed (651-215-0246) or mailed, please send to the attention of: Mary Baker, MPCA, 520 Lafayette Road North, St. Paul, MN 55155.

- If the applicant is governed by a Board, a Board Resolution is required - authorizing application submittal, committing project funding, and authorizing signature for the execution of a grant agreement (sample Resolution provided on website).

- Matching funds may not be those secured from other MPCA administered programs or other Minnesota state agencies or departments.

- For additional assistance or more information about the FY 2012-13 EA Grant Program, RFP, or application process, please refer to the "Frequently Asked Questions."

- Applications are due by 2:00 p.m. Central Time on June 14, 2012. Applications must be electronically submitted to grants-loans.pca@state.mn.us. If you need additional assistance or experience difficulties in electronically submitting the application, contact Mary Baker (mary.baker@state.mn.us or 651-757-2208 or 1-800-657-3864) before the specified deadline.