GREEN CHEMISTRY & DESIGN COLLEGE CURRICULUM GRANT PROJECTS
Request for Proposals

I. Project Overview
The Minnesota Pollution Control Agency (MPCA) requests applications from accredited Minnesota institutions of higher education for projects to integrate Green Chemistry and Design into new or existing courses and or curriculum requirements in (but not limited to) chemistry, physical sciences, engineering, or combinations of these or other subjects. Educators have also worked aspects of green chemistry into business, social science, education, marketing and communication, so if a persuasive case is made, any in a wide range of proposals could be successful. MPCA is offering grants to Minnesota post-secondary educational institutions which will allow successful applicants to develop results such as:

- Green chemistry educational products like lesson plans or lab exercises;
- Students attuned to green chemistry either through the curriculum development or its implementation (taking the resulting courses);
- Plans for implementing the curriculum changes over time;
- Plans for leveraging materials developed through long-term dissemination (in Minnesota and beyond);
- Larger networks of students and faculty interested in more usage of green chemistry.

The grants are designed to allow the educator the research, development and collaboration time necessary to accomplish the integration, or to create other facilitating circumstances using grant funds.

MPCA has approximately $23,000 for 2 to 3 projects which are evaluated and recommended by a review team as best meeting the evaluation criteria stated in this Request for Proposals (RFP). Any amount of funds up to $15,000 may be requested. The MPCA reserves the right to make reduced awards or refrain from awarding any grants. The application materials and additional information regarding this RFP may be found at [http://www.pca.state.mn.us/greenchemistry](http://www.pca.state.mn.us/greenchemistry). The due date for applications is Thursday, September 29, 2011, at 2:00 p.m. Central Daylight Time (CDT).

Purpose
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 college students - of the toxicological and life-cycle impacts of chemical use choices on humans and the environment. This grant is a component of the education focus
in MPCA’s emerging green chemistry initiative, with the goal of shaping the future conduct of professional disciplines. In addition, this project builds up the networks necessary to match higher education students and their faculty more specifically to the real-world green chemistry needs and challenges of companies, increasing the relevance of education and its value to Minnesota’s economy. The resulting green chemistry education will aid in product designs that will measurably reduce life-cycle environmental and energy use impacts.

**Deliverables/Metrics (examples: applicants are not limited to these)**

- Green chemistry educational products developed (unique or adapted documents like syllabi, lesson plans, lab exercises, graduation requirements)
- Quantitative or qualitative data on the involvement of students and peers in the development process
- Plans for implementing the curriculum changes over time
- Projected annual number of students taking grant-supported courses
- Number of chemistry and engineering majors (expected to use the curricula in careers)
- Plans for leveraging materials developed through long-term dissemination in Minnesota or beyond
- Networks of students and faculty created or augmented (numbers and/or qualitative data on possible results of such networking).

**II. Eligibility Criteria**

**Eligible applicants**

- Any accredited institution of higher education located in the state of Minnesota which is responsible for design and delivery of undergraduate or graduate student curricula.

**Ineligible applicants**

- Federal, State, Local or other Governmental Units not delivering accredited undergraduate or graduate post-secondary education;
- Businesses or organizations not delivering accredited undergraduate or graduate post-secondary education;
- Any educational entity located outside the state of Minnesota.

**Eligible projects**

- Eligible projects will incorporate the 12 principles of Green Chemistry and the 12 principles of Green Engineering into the classroom, laboratory or internship curricula. The University of Oregon’s Greener Education Materials for Chemists (GEMS) database offers examples of such incorporation.

**Ineligible projects**

- Projects seeking funding for general operating expenses;
- Projects for environmental compliance or remediation;
- Projects limited to individual benefit.
Eligible Costs

- Eligible costs are those costs directly incurred through work activities that are solely related to and necessary for producing the work products and deliverables as described in the work plan of the grant agreement during the grant agreement period. Only eligible costs will be reimbursed. No specific amount or percentage of matching funds is required; however, grantees are expected to provide additional funds if necessary to complete the project. For example, efforts after the grant period to implement and disseminate products would necessarily require the institution’s own funds, and would therefore be useful to describe and quantify.

Eligible costs may include the following:

- Actual wages and expenses of Grantee’s employees if specified and documented;
- Communication costs for postage, and other related expenses;
- Fringe benefit costs limited to FICA/Medicare, retirement, and health insurance of Grantee’s employees if specified and documented (including rates and amounts);
- Professional services as specified in the grant agreement that are rendered by the Grantee;
- Professional services as specified in the grant agreement that are rendered by individuals or organizations not a part of the Grantee organization;
- Costs for subcontractors as allowed with prior approval from MPCA;
- Cost of supplies for delivering the class;
- Indirect costs at established institutional rates and related to project activities and costs (include rate and amounts).

Ineligible costs  All costs not defined as eligible costs, including but not limited to the following:

- The cost of preparing the grant application;
- The cost of activities initiated and costs incurred prior to execution of the grant agreement;
- The purchase of real property (land, real estate, and buildings) and/or vehicles;
- The cost of equipment, unless deemed appropriate and necessary for the project by the MPCA (prior approval required);
- The cost of general operating support such as routine overhead expenses not related to the grant project;
- The cost of getting into or returning to environmental compliance;
- Fund raising;
- Taxes, except sales tax on goods and services;
- Insurance;
- Bad debts, late payment fees, finance charges or contingency funds, interest, investment management fees;
- Lobbying, lobbyists, and political contributions;
- Merit, award, and bonuses;
- Employee worksite parking;
• Entertainment, gifts and prizes;
• Mark-up on purchases and/or subcontracts.

III. Experience and Qualifications required for the project
The applicant and the applicant’s departmental or programmatic leadership should be planning or actively pursuing opportunities to incorporate aspects of green chemistry teaching and learning into curricula and/or program requirements. Aspects of green chemistry can be defined by the applicant but the applicant is encouraged to feature practical application of green chemistry’s use.

Knowledge and resources

Minimum for project lead and/or key partner(s)
• An understanding of the application of the 12 principles of Green Chemistry and the 12 principles of Green Engineering.
• Advanced degree(s) in chemistry, chemical engineering, environmental studies, or other engineering and some level of experience in working in or with product design or manufacturing.

Preferred knowledge among project team
• Training in toxicology or related experience and access to contemporary research on toxicological mechanisms (how chemicals react with human and animal physiology at the molecular level), including structure-activity relationships.
• An understanding of life-cycle analysis impacts and costs of products, production, worker or consumer exposures, and product disposal, degradation, or recovery.

The applicant may subcontract with qualified parties who can assist with particular aspects of the curriculum development or delivery.

Payments to Subcontractors As required by Minn. Stat. § 16A.1245, the prime contractor must pay all subcontractors, less any retainage, within 10 calendar days of the prime contractor’s receipt of payment from the State for undisputed services provided by the subcontractor(s) and must pay interest at the rate of one and one-half percent per month or any part of a month to the subcontractor(s) on any undisputed amount not paid on time to the subcontractor(s).

If they are necessary, subcontracts between successful applicants and third-party providers should be executed within a reasonable amount of time once the Grant Agreement with the MPCA is executed. All work eligible for reimbursement under the grant may begin after the agreement is executed and must be completed by September 30, 2012.

IV. Application and Submittal Process
Potential applicants may submit questions about the RFP and possible projects only through alister.innes@state.mn.us. Please reference “Green Chemistry and Design College Curriculum Projects” in the subject line of the email.
Other MPCA and review team personnel are NOT AUTHORIZED to discuss this request for proposal with proposers before the proposal submission deadline. Contact regarding this RFP with any personnel not listed above could result in disqualification.

Each Thursday, MPCA’s project team will collect e-mailed questions submitted during the preceding week. The team will publish both the questions and the written responses through the project web page each Tuesday. Information regarding the Questions and Answers may be found at http://www.pca.state.mn.us/greenchemistry. The final day for submitting questions will be Thursday, September 22, 2011; the final date responses will be published will be Tuesday, September 27, 2011.

Pre-application assistance may include helping potential applicants determine whether the applicant itself or the applicant’s proposed project is eligible for funding, assisting potential applicants with administrative issues relating to the submission of an application, and responding to requests for clarification of the announcement.

Regardless of MPCA availability to answer pre-application questions, applicants are solely responsible for the content and submission of their application, and receiving information and assistance from MPCA does not guarantee funding.

In completing the application, please ensure that all the items are addressed. There is no page limit restricting the amount of information that you may wish to provide. All supporting documents are due at the time the application is submitted.

If necessary, after submission of applications, but before selection decisions are made, MPCA personnel may have limited communication with applicants for the purpose of clarifying certain aspects of the application relating to eligibility factors, for partial funding purposes, or to resolve minor or clerical errors. Such communications shall not be used to address/correct application deficiencies or material omissions.

Submittal Deadline: Applications are due by September 29, 2011, at 2:00 p.m. CDT.

Checklist for required submittals:

- Completed application (ATTACHMENT 1), including all information requested on Application Cover Page, work plan, and budget;
- Notification via a separate letter addressing any exceptions to the proposed Terms and Conditions as provided in the Sample Grant Agreement (Attachment 2) or to Federal Terms and Conditions (Attachment 4[V]);
- Any request for designation of “trade secret” information pursuant to Minn. Stat. § 13.37, subd. 1b;
- While matching funds (cash and/or in-kind) are not required, a commitment of any necessary resources beyond the grant award is considered identified and documented as secured if the applicant is providing all matching funds, or if the applicant submits
written documentation (letters or resolutions) from those committed to provide the matching funds;
• Any support letters obtained, either from partners or interested parties - A letter of support should specify the services the grant partner will provide to help carry out work plan activities;
• Individual and Organizational Conflict of Interest form (Attachment 3);
• Applications must be scanned with the appropriate signatures and sent via email to Contracts.PCA@state.mn.us;
• Applications that are faxed, submitted in a format other than as described above, or sent directly to MPCA staff will not be considered.

V. Review and Evaluation Process
Eligible applications will be evaluated by a review team. Applicants will be evaluated to determine which projects best meet the project purposes and evaluation criteria. The Review team will recommend projects to MPCA management for funding. The MPCA reserves the right to make reduced awards or refrain from awarding any grants. Once management has made the determination of contingent award(s), prospective grantee(s) may be contacted for additional information, discussion of the application with the project manager, project partners and/or other experts in the field, as needed, prior to execution of the grant agreement.

Competitive Scoring:
Applications must contain all of the elements and be in the format listed below under Section IV of this RFP to be considered for funding. Applications must clearly and completely address each weighted evaluation criteria below:

Pass / Fail Criteria:
• Response submitted on time. Late applications will not be considered.
• Response must contain application and all required supporting documents. Please review requirements fully to ensure you have all documents; and,
• Signed by the Authorized Representative of the educational institution.

A 100 point scale will be used to evaluate the applications. The factors and their respective weights upon which the applications will be judged are as follows:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Weight</th>
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<tbody>
<tr>
<td>1. Application Completeness</td>
<td>10%</td>
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<tr>
<td>2. Project Description and Outcomes</td>
<td>30%</td>
</tr>
<tr>
<td>3. Experience and Qualifications of Applicant and Team</td>
<td>30%</td>
</tr>
<tr>
<td>4. Project Work Plan and Budget</td>
<td>30%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
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</tbody>
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VI. General Conditions of Grant Agreements

- **Federal Funds** By entering into this grant agreement the grantee certifies that it shall comply with the conditions of the Appropriations Act of 1996, Public Law 104-134 and CFDA 66.605) and with the applicable provisions of the U.S. EPA Performance Partnership Grant Agreement No. BG98568809 between the U.S. EPA and the MPCA. The grantee is responsible for compliance with all federal requirements and accepts full financial responsibility for any additional requirements imposed due to their failure to comply. Additional terms and conditions as identified in ATTACHMENT 4(V) herein incorporated by reference and made an enforceable part of this grant agreement.

- **Award of Grant** Each grant recipient must formally enter into a grant agreement. The applicant will be notified by MPCA staff. Grant awards shall be made to those projects that best meet the evaluation criteria identified in the RFP as funds allow. Awards are contingent on successful execution of a grant agreement within 60 (sixty) days of notification. In addition to the ability to make reduced awards, the MPCA reserves the right to refrain from awarding any grants. The grant agreement is a legal, binding document requiring several signatures for execution. Grantees are expected to keep accurate financial records of the project. (Sample Grant Agreement is attached as ATTACHMENT 2.)

- **Reporting Requirements** All projects must submit progress reports for the duration of the grant agreement period. At a minimum, projects require semi-annual progress reports. Due dates will be addressed in the grant agreement. A final report to the MPCA will be required no later than 30 days after the expiration date of the grant agreement. If the grantee has an active Web site, the grantee must post reports on that Web site and make them available to the public. For grantees without active Web sites, the MPCA shall display these reports on its own Web site.

- **Individual and Organizational Conflicts of Interest.** (Minn. Stat. §16B.97-Grants Management, Conflict of Interest Policy for State Grant-Making, Policy Number: 08-01) Applicant must provide a list of all entities with which it has relationships that create, or appear to create, a work or organizational conflict of interest with the work that is contemplated in this request for proposals. The list should indicate the name of the entity, the relationship, and a description of the conflict. An organizational conflict of interest occurs when: a grantee is unable or potentially unable to render impartial assistance or advice to the State due to competing duties or loyalties; a grantee's objectivity in carrying out the grant agreement is or might be otherwise impaired due to competing duties or loyalties; and a grantee or potential grantee has an unfair competitive advantage through being furnished unauthorized proprietary information or source selection information that is not available to all competitors/applicants. All applicants must complete and submit a Conflict of Interest/Organizational Conflict of Interest Disclosure Form, regardless of whether an apparent or actual
conflict of interest exists. The Form is included in the RFP as ATTACHMENT 3. The applicant agrees that if after award an individual or organizational conflict of interest is discovered, an immediate and full disclosure in writing must be made to the MPCA. If a conflict of interest is determined to exist, the MPCA may, at its discretion, cancel the agreement. In the event the grantee was aware of a conflict of interest prior to the award of the grant and did not disclose the conflict, the MPCA may terminate the award for default.

• **Data Practices Information.** Responses submitted by an applicant are private or nonpublic until the responses are opened. Once the responses are opened, the name and address of the applicant and the amount requested is public. All other data in a response is private or nonpublic data until completion of the evaluation process. After a granting agency has completed the evaluation process, all remaining data in the responses is public with the exception of trade secret data as defined and classified in Minn. Stat. § 13.37. A statement by a grantee that the response is copyrighted or otherwise protected does not prevent public access to the response as defined in Minn. Stat. § 13.599, subd. 3.
Authorizing Resolution (If applicable)

A resolution authorizing the organization/applicant to execute the grant agreement is needed from county governments, nonprofits, trade associations, and other organizations in which a board of directors make decisions.

Sample Authorization Resolution

WHEREAS, ________________________________ (name of your organization) has applied for a grant from the Minnesota Pollution Control Agency (MPCA), under its GREEN CHEMISTRY AND DESIGN grants program; and,

WHEREAS, __________________ (name of your organization) is committed to implementing the proposed project as described in the grant application, if MPCA funding is received; and

WHEREAS, MPCA requires that ____________________ (name of your organization) enter into a grant agreement with MPCA that identifies the terms and conditions of the funding award:

BE IT RESOLVED THAT the __________ (name of governing body) of ________________ (name of your organization) hereby agrees to enter into and sign a grant agreement with the MPCA, and authorizes and directs __________ (name), ______________ (title) to be the Authorized Representative for this grant agreement and authorizes ______________ (name), ______________ (title), to act as the Project Manager, to carry out the project specified therein and to comply with all of the terms, conditions, and provisions of the grant agreement on its behalf of governing or organization.

____________________________________
(Date your governing body or organization agreed to this resolution)

____________________________________
(Signature of an officer with your governing body)