EPA DRAFT FORMAT RESEARCH PERFORMANCE PROGRESS REPORT

COVER PAGE DATA ELEMENTS

- Federal Agency and Organization Element to Which Report is Submitted
- Federal Grant or Other Identifying Number Assigned by Agency
- Project Title
- PD/PI Name, Title and Contact Information (e-mail address and phone number)
- Name of Submitting Official, Title, and Contact Information (e-mail address and phone number), if other than PD/PI
- Submission Date
- DUNS and EIN Numbers
- Recipient Organization (Name and Address)
- Recipient Identifying Number or Account Number, if any
- Project/Grant Period (Start Date, End Date)
- Reporting Period End Date
- Report Term or Frequency (annual, semi-annual, quarterly, other)
- Signature of Submitting Official (signature shall be submitted in accordance with agencyspecific instructions)

ACCOMPLISHMENTS: What was done? What was learned?

The information provided in this section allows the agency to assess whether satisfactory progress has been made during the reporting period.

INSTRUCTIONS – Accomplishments

The PI is reminded that the grantee is required to obtain prior written approval from the awarding agency grants official whenever there are significant changes in the project or its direction. See agency specific instructions for submission of these requests.

- What are the major goals and objectives of the project?
- What was accomplished under these goals?
- What opportunities for training and professional development has the project provided?
- How have the results been disseminated to communities of interest?
- What do you plan to do during the next reporting period to accomplish the goals and objectives?

What are the major goals of the project?

List the major goals of the project as stated in the approved application or as approved by the agency. If the application lists milestones/target dates for important activities or phases of the project, identify these dates and show actual completion dates or the percentage of completion.

Generally, the goals will not change from one reporting period to the next. However, if the awarding agency approved changes to the goals during the reporting period, list the revised

goals and objectives. Also explain any significant changes in approach or methods from the agency approved application or plan.

What was accomplished under these goals?

For this reporting period describe: 1) major activities; 2) specific objectives; 3) significant results, including major findings, developments, or conclusions (both positive and negative); 4) key outcomes or other achievements; and 5) associated quality assurance and quality control (QA/QC) functions and findings. Include a discussion of stated goals not met. As the project progresses, the emphasis in reporting in this section should shift from reporting activities to reporting accomplishments.

- Include a comparison of actual accomplishments with the goals and objectives.
- If EPA determines that the recipient has not made sufficient progress toward completing
 its research, EPA may terminate the assistance agreement. Sufficient progress is
 demonstrated by the grantee meeting the milestones described in the research plan to
 the maximum extent practicable, while taking into account any extenuating factors that
 may have delayed progress.
- Briefly describe the results of QA/QC activities performed during this reporting period including: Status of quality system implementation; results of internal quality reviews/assessments; problems identified that could adversely affect the quality of the work performed under the agreement; corrective actions implemented; and significant revisions to quality documentation.

What opportunities for training and professional development has the project provided?

If the research is not intended to provide training and professional development opportunities or there is nothing significant to report during this reporting period, state "Nothing to Report".

Describe opportunities for training and professional development provided to anyone who worked on the project or anyone who was involved in the activities supported by the project. "Training" activities are those in which individuals with advanced professional skills and experience assist others in attaining greater proficiency. Training activities may include, for example, courses or one-on-one work with a mentor. "Professional development" activities result in increased knowledge or skill in one's area of expertise and may include workshops, conferences, seminars, study groups, and individual study. Include participation in conferences, workshops, and seminars not listed under major activities.

How have the results been disseminated to communities of interest?

If there is nothing significant to report during this reporting period, state "Nothing to Report."

Describe how the results have been disseminated to communities of interest. Include any outreach activities that have been undertaken to reach members of communities who are not usually aware of these research activities, for the purpose of enhancing public understanding and increasing interest in learning and careers in science, technology, and the humanities.

What do you plan to do during the next reporting period to accomplish the goals?

If there are no changes to the agency-approved application or plan for this effort, state "No change."

Describe briefly what you plan to do during the next reporting period to accomplish the goals and objectives.

PRODUCTS: What has the project produced?

Publications are the characteristic product of research. Agencies evaluate what the publications demonstrate about the excellence and significance of the research and the efficacy with which the results are being communicated to colleagues, potential users, and the public, not the number of publications.

Many projects (though not all) develop significant products other than publications. Agencies assess and report both publications and other products to Congress, communities of interest, and the public.

INSTRUCTIONS – Products

List any products, or outputs, resulting from the project during the reporting period. The term "output" means an environmental activity or effort, and associated work products, related to a specific environmental goal(s), (e.g., testing a new methodology), that will be produced or developed over a period of time under the agreement. Examples of products include:

- Publications, conference papers, and presentations;
- Web site(s) or other Internet site(s);
- Technologies or techniques;
- Inventions, patent applications, and/or licenses; and
- Other products, such as data or databases, physical collections, audio or video products, software or NetWare, models, educational aids or curricula, instruments, or equipment

If there is nothing to report under a particular item, state "Nothing to Report".

Publications, conference papers, and presentations

Report only the major publication(s) resulting from the work under this award. There is no restriction on the number. However, agencies are interested in only those publications that most reflect the work under this award in the following categories:

• **Journal publications.** List peer-reviewed articles or papers appearing in scientific, technical, or professional journals. Include any peer-reviewed publication in the periodically published proceedings of a scientific society, a conference, or the like. A publication in the proceedings of a one-time conference, not part of a series, should be reported under "Books or other non-periodical, one-time publications."

Identify for each publication: author(s); title; journal; volume: year; page numbers; status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no). Provide links to publications, where available. The publication list should be cumulative of previous Annual Reports.

 Books or other non-periodical, one-time publications. Report any book, monograph, dissertation, abstract, or the like published as or in a separate publication, rather than a periodical or series. Include any significant publication in the proceedings of a one-time conference or in the report of a one-time study, commission, or the like.

Identify for each one-time publication: author(s); title; editor; title of collection, if applicable; bibliographic information; year; type of publication (book, thesis or dissertation, other); status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no).

Other publications, conference papers and presentations. Identify any other
publications, conference papers and/or presentations not reported above. Specify the
status of the publication as noted above.

Web site(s) or other Internet site(s)

List the URL for any Internet site(s) that disseminates the results of the research activities. A short description of each site should be provided. It is not necessary to include the publications already specified above in this section.

Technologies or techniques

Identify technologies or techniques that have resulted from the research activities. Describe the technologies or techniques and how they are being shared.

Inventions, patent applications, and/or licenses

Identify inventions, patent applications with date, and/or licenses that have resulted from the research. Submission of this information as part of an interim research performance progress report is not a substitute for any other invention reporting required under the terms and conditions of an award.

Other products

Identify any other significant products that were developed under this project. Describe the product and how it is being shared. Examples of other products are:

- Databases;
- Physical collections;
- Audio or video products;
- Software or NetWare;
- Models;
- Educational aids or curricula;
- Instruments or equipment;
- Data & Research Material (e.g., cell lines, DNA probes, animal models); and
- Other.

IMPACT: What is the impact of the project? How has it contributed?

Over the years, this base of knowledge, techniques, people, and infrastructure is drawn upon again and again for application to commercial technology and the economy, to health and safety, to cost-efficient environmental protection, to the solution of social problems, to numerous other aspects of the public welfare, and to other fields of endeavor.

The taxpaying public and its representatives deserve a periodic assessment to show them how the investments they make benefit the nation. Through this reporting format, and especially this section, recipients provide that assessment and make the case for Federal funding of research and education.

Agencies use this information to assess how their research programs:

- increase the body of knowledge and techniques;
- enlarge the pool of people trained to develop that knowledge and techniques or put it to use; and
- improve the physical, institutional, and information resources that enable those people to get their training and perform their functions.

INSTRUCTIONS – Impact

This component will be used to describe ways in which the work, findings, and specific products of the project have had an impact during this reporting period. Describe distinctive contributions, major accomplishments, innovations, successes, or any change in practice or behavior that has come about as a result of the project relative to:

- the development of the principal discipline(s) of the project;
- other disciplines;
- the development of human resources;
- physical, institutional, and information resources that form infrastructure:
- technology transfer (include transfer of results to entities in government or industry, adoption of new practices, or instances where research has led to the initiation of a startup company); or
- society beyond science and technology.

What is the impact on the development of the principal discipline(s) of the project?

If there is nothing significant to report during this reporting period, state "Nothing to Report".

Include a discussion of the project's outcomes. The term "outcome" means the results, effect, or consequence that will occur from the activit(ies) discussed above that is related to an environmental, behavioral or health-related objective. Describe how findings, results, techniques that were developed or extended, or other products from the project made an impact or are likely to make an impact on the base of knowledge, theory, and research and/or pedagogical methods in the principal disciplinary field(s) of the project. Summarize using language that an intelligent lay audience can understand (Scientific American style).

How the field or discipline is defined is not as important as covering the impact the work has had on knowledge and technique. Make the best distinction possible, for example, by using a "field" or "discipline", if appropriate, that corresponds with a single academic department (i.e., physics rather than nuclear physics).

• How does the research add to the understanding of or solutions for environmental problems or is otherwise of benefit to the environment and human health?

What is the impact on other disciplines?

If there is nothing significant to report during this reporting period, state "Nothing to Report".

Describe how the findings, results, or techniques that were developed or improved, or other products from the project made an impact or are likely to make an impact on other disciplines.

What is the impact on the development of human resources?

If there is nothing significant to report during this reporting period, state "Nothing to Report".

Describe how the project made an impact or is likely to make an impact on human resource development in science, engineering, and technology. For example, how has the project:

- provided opportunities for research and teaching in the relevant fields;
- improved the performance, skills, or attitudes of members of underrepresented groups that will improve their access to or retention in research, teaching, or other related professions;
- developed and disseminated new educational materials or provided scholarships; or
- provided exposure to science and technology for practitioners, teachers, young people, or other members of the public?

What is the impact on physical, institutional, and information resources that form infrastructure?

If there is nothing significant to report during this reporting period, state "Nothing to Report".

Describe ways, if any, in which the project made an impact, or is likely to make an impact, on physical, institutional, and information resources that form infrastructure, including:

- physical resources such as facilities, laboratories, or instruments;
- institutional resources (such as establishment or sustenance of societies or organizations); or
- information resources, electronic means for accessing such resources or for scientific communication, or the like.

What is the impact on technology transfer?

If there is nothing significant to report during this reporting period, state "Nothing to Report".

Describe ways in which the project made an impact, or is likely to make an impact, on commercial technology or public use, including:

- transfer of results to entities in government or industry;
- instances where the research has led to the initiation of a start-up company; or
- adoption of new practices.

What is the impact on society beyond science and technology?

If there is nothing significant to report during this reporting period, state "Nothing to Report".

Describe how results from the project made an impact, or are likely to make an impact, beyond the bounds of science, engineering, and the academic world on areas such as:

- improving public knowledge, attitudes, skills, and abilities;
- changing behavior, practices, decision making, policies (including regulatory policies), or social actions; or
- improving social, economic, civic, or environmental conditions.

Please also address the following:

- relevance to the Agency's mission;
- potential practical applications
- Users of the information generated from your research (e.g., state, local government; Academic institutions; Non-profit institutions); and
- Whether research findings have had a direct impact on a community.

CHANGES/PROBLEMS

The PI is reminded that the grantee is required to obtain prior written approval from the awarding agency grants official whenever there are significant changes in the project or its direction. See agency specific instructions for submission of these requests. If not previously reported in writing, provide the following additional information, if applicable:

- Changes in approach and reasons for change.
- Actual or anticipated problems or delays and actions or plans to resolve them.
- Changes that have a significant impact on expenditures.
- Significant changes in use or care of animals, human subjects, and/or biohazards.

INSTRUCTIONS – Changes/Problems

If not previously reported in writing to the agency through other mechanisms, provide the following additional information or state, "Nothing to Report".

Changes in approach and reasons for change

Describe any changes in approach during the reporting period and reasons for these changes. Remember that significant changes in objectives and scope require prior approval of the agency.

• If the goals of the project have not changed from the original application, state this.

Actual or anticipated problems or delays and actions or plans to resolve them

Describe problems or delays encountered during the reporting period which may materially impair the ability to meet the results (outputs/outcomes) specified in the application and the actions or plans to resolve them.

 Include a discussion of any absence or changes of key personnel involved in the project.

Changes that have a significant impact on expenditures

Describe changes during the reporting period that may have a significant impact on

expenditures, for example, delays in hiring staff or favorable developments that enable meeting objectives at less cost than anticipated.

 Discuss expenditures to date along with a comparison of the percentage of the project completed to the project schedule and an explanation of any costs which are higher than originally estimated.

Significant changes in use or care of human subjects, vertebrate animals, and/or biohazards

Describe significant deviations, unexpected outcomes, or changes in approved protocols for the use or care of human subjects, vertebrate animals, and/or biohazards during the reporting period. If required, were these changes approved by the applicable institution committee and reported to the agency? Also specify the applicable Institutional Review Board/Institutional Animal Care and Use Committee approval dates.

Change of primary performance site location from that originally proposed

Identify any change to the primary performance site location identified in the proposal, as originally submitted.

SPECIAL REPORTING REQUIREMENTS

Respond to any special reporting requirements specified in the award terms and conditions, as well as any award specific reporting requirements.