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EPA ORDER

POLICY FOR INCREASING ACCESS TO RESULTS OF EPA-FUNDED EXTRAMURAL SCIENTIFIC RESEARCH

1.0 BACKGROUND AND PURPOSE

On February 22, 2013, the White House Office of Science and Technology Policy issued a memorandum entitled “Increasing Access to the Results of Federally Funded Research.” This memorandum directed federal departments and agencies that spend more than \$100 million per year on research and development to develop and submit a plan to OSTP to increase public access to peer-reviewed, scientific research publications, and the underlying, digital research data. This policy establishes the U. S. Environmental Protection Agency policy for increasing access to peer-reviewed scientific research journal publications or associated author manuscripts, and their underlying digital research data, resulting from extramural research awards, as described in EPA’s “Plan to Increase Access to Results of EPA-Funded Scientific Research.”

2.0 AUTHORITY

The authorities for this policy are the: OSTP Memorandum entitled “[Increasing Access to the Results of Federally Funded Research](#)”; [Executive Order 13642 -- Making Open and Machine Readable the New Default for Government Information](#); Office of Management and Budget Memorandum M-13-13 entitled “[Open Data Policy-Managing Information as an Asset](#)”; the Foundations for Evidence-Based Policymaking Act of 2018; and EPA’s “[Plan to Increase Access to Results of EPA-Funded Scientific Research](#).”

3.0 POLICY

It is agency policy to ensure that the results of EPA-funded extramural scientific research are accessible to the public to the greatest extent feasible consistent with applicable law; policies and orders; the agency’s mission; resource constraints; and U.S. national, homeland, and economic security. The objective of this policy is to maximize, at no charge, access by the public to peer-reviewed scientific research journal publications or associated author manuscripts, and their underlying digital research data created in whole or in part with agency funds, while protecting personal privacy; recognizing proprietary interests, confidential business information, and intellectual property rights; and avoiding significant negative impact on intellectual property rights, innovation, and U.S. competitiveness. To do so, this policy describes requirements for agency offices that manage research through extramural agreements (i.e., grant and cooperative agreements, interagency agreements, and contracts). These include ensuring that recipients/contractors make EPA-funded extramural scientific research journal publications or associated author manuscripts accessible to the public at no charge via the National Institutes of Health’s PubMed Central repository and post the digital research data underlying the

publications to a publicly accessible platform. Publication-related metadata will be accessible through PMC. Metadata pertaining to the dataset underlying the publication will be accessible from the agency's dataset metadata repository.

4.0 APPLICABILITY AND EFFECTIVE DATE

This policy applies to:

4.1.a Competitive assistance agreement announcements issued on or after the effective date of this order;

4.1.b Competitive assistance agreements resulting from announcements issued on or after the effective date of this order;

4.1.c Non-competitive assistance agreements awarded on or after the effective date of this order;

4.1.d Contracts awarded as a result of solicitations issued 90 days or more after the effective date of this order where the program office has identified the research via an approved and accepted Advance Acquisition Plan. The AAP must: 1) be compliant with this policy and include all the specific deliverable requirements in the Statement of Work/Performance Work Statement; 2) state in writing that all appropriate agency funding to support the requirement is identified in the Independent Government Estimate/Independent Government Cost Estimate and is recorded in the EPA Acquisition System; and, 3) contain the requesting program office determination in writing of concurrence or non-concurrence including its assessment stating that: a) a journal publication is a deliverable; b) the cost associated with the contractor's compliance with this policy is funded; and c) the program office will report the contractor's non-compliance to the Contracting Officer and the Contracting Officer Representative via this policy. Such non-compliance should be reported to the EPA CO of record for proper file documentation.

4.1.e Funds-out interagency agreements awarded on or after the effective date of this order with the exception cited in Section 8.

This policy applies to EPA-funded extramural scientific research performed under assistance agreements, interagency agreements and contracts. Awards or funds transferred to another Federal agency under an interagency agreement that do not fund the production of scientific research results are not subject to this policy. This policy does not apply to amendments (including supplemental and incremental) made to existing assistance agreements and interagency agreements or modifications to existing contracts, originally awarded before the effective date of this order.

5.0 DEFINITIONS

Assistance agreement is an agency grant or cooperative agreement.

Author manuscript is the version of a scientific research journal publication that has been peer reviewed and accepted for publication by the journal including all changes made by the author during the peer review process, but not the formatted, copyrighted version created by the publisher.

Contract means a mutually binding legal relationship obligating the seller to furnish the supplies or services, including construction, and the buyer to pay for them. It includes all types of commitments that obligate the Government to an expenditure of appropriated funds and that, except as otherwise authorized, are in writing. In addition to bilateral instruments, contracts include, but are not limited to, awards and notices of awards; job orders or task letters issued under basic ordering agreements; letter contracts; orders, such as purchase orders, under which the contract becomes effective by written acceptance or performance; and bilateral contract modifications. Contracts do not include grants and cooperative agreements covered by 31 U.S.C. 6301, et seq.

Dual use research of concern (DURC) is life sciences research that, based on current understanding, can be reasonably anticipated to provide knowledge, information, products, or technologies that could be directly misapplied to pose a significant threat with broad potential consequences to public health and safety, agricultural crops and other plants, animals, the environment, material (including food, water, supplies, or material of any kind), or national security.

Embargo period is the time after an article's journal publication during which EPA does not provide for public access to the author manuscript associated with the publication. EPA has established a maximum twelve-month post-publication embargo period for making author manuscripts publicly accessible in PMC free of charge. EPA and a journal's publisher may agree to a shorter embargo period when the journal publication is not publicly accessible.

EPA's dataset metadata repository – The agency maintains a publicly accessible dataset metadata repository that provides Web-based information and services that enables data consumers to discover, view, and access datasets, as well as geospatial tools, made available by EPA's program offices, regions, labs, and centers. EPA's dataset metadata repository enables those who submit data to EPA to make datasets and geospatial information and services discoverable, viewable, and accessible by others. Publicly viewable information and metadata contributed to the dataset metadata repository are also shared with interagency data sharing sites. Metadata pertaining to the dataset underlying a journal publication resulting from EPA-funded extramural scientific research will be posted in EPA's dataset metadata repository.

Extramural research is research that is done by entities external to EPA, e.g., through assistance agreements, contracts, and interagency agreements.

Interagency Agreement (funds-out) is a written agreement under which another Federal agency provides goods and/or services to EPA and EPA pays for the other agency's expenses. Funds flow from EPA. The agreement, among other things, specifies the (a) rights and obligations of each agency under the agreement; (b) deliverables; (c) period of performance; (d) budget and other funding information; and (e) terms and conditions that address payment and other applicable requirements.

Joint Publication is a scientific research journal publication developed jointly by a researcher external to EPA and an EPA researcher.

Journal Publication is the full text document, and any associated supplementary text materials, posted or published by a peer-reviewed journal. This term describes specific types of articles or research data deemed published when the version of record of scientific research results appears in a peer-reviewed journal (on-line or hard copy). Included are articles in journals specializing in natural and physical sciences (e.g., biology, chemistry, physics, health science, geology, and engineering), social sciences (e.g., economics, psychology, and sociology), mathematics, statistics and computer science.

Metadata are structured, digital records that describe the content, data resources, and other information needed to help locate, use, understand, share and manage public access to manuscripts and associated data. Metadata should provide information (content and/or data) about the data's purpose, means of creation or collection, date of creation or collection; the name of the author/creator; the peer-reviewed publisher; and, for data in particular, the characteristics of the resource (i.e., raw data in its original form or how the data were changed), what they were used for and their use limitations, and quality assurance. Where possible, the metadata record should provide a link to the location where the full text and associated supplemental materials are available. Metadata records describing geospatial datasets should follow the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata (CSDGM) or International Standards for Organization (ISO) metadata standards when possible.

NIH Manuscript Submission (NIHMS) system – The National Institutes of Health's submission system for inclusion of journal publications or associated author manuscripts in PubMed Central.

Pass-through entity, as defined in 2 CFR 200.74, means a non-Federal entity that provides a subaward to a subrecipient to carry out part of a Federal program.

PubMed Central (PMC) is a free digital repository that archives publicly accessible, full-text scholarly articles. It is a full-text archive of the journal publication and supplemental information submitted by participating journals or the associated author manuscript submitted in conformance with public access policies.

Recipient, as defined in 2 CFR 200.86, means a non-Federal entity that receives a Federal award directly from a Federal awarding agency to carry out an activity under a Federal program. The term recipient does not include subrecipients.

Scientific data management plan (SDMP) is a document that accompanies a research proposal/application and includes information on the scope, costs, and process of making scientific research results accessible, usable, protected and preserved.

Scientific research is the systematic inquiry directed toward fuller scientific knowledge or understanding of the subject studied. The results of scientific research refer to both the research publications in peer-reviewed journals and the associated digital research data that support the scientific results of the research journal publications. The following specific examples of scientific research are excluded from this Policy: interim results or other preliminary scientific research data not used to generate the results in the final peer-reviewed publication; preliminary scientific research documentation beyond the article, supplementary materials, and metadata

regarding preliminary research plans, including preliminary study protocols and other preliminary a priori decisions (recognizing that preliminary plans may have changed during the research project); and information that may disclose intellectual property rights, national security, and other classified information.

Scientific research data are defined, consistent with the OSTP Memorandum, as the digital recorded factual material commonly accepted in the scientific community as necessary to validate research findings. Research data as used in this Order are the digital scientific research data resulting from EPA-funded extramural scientific research. Research data do not include: preliminary analyses, drafts of scientific papers, plans for future research, peer reviews, communications with colleagues, physical objects (e.g., laboratory samples), trade secrets, commercial information, materials necessary to be held confidential by a researcher until they are published, or similar information protected under law, and personnel, medical, and similar files the disclosure of which would constitute a clearly unwarranted invasion of personal privacy, such as information that could be used to identify a particular person in a research study.

Subaward, as defined in 2 CFR 200.92, means an award provided by a pass-through entity to a subrecipient for the subrecipient to carry out part of a Federal award received by the pass-through entity. Subawards do not include payments to a contractor or payments to an individual that is a beneficiary of a federal program. A subaward may be provided through any form of legal agreement, including an agreement that the pass-through entity considers a contract.

Subrecipient, as defined in 2 CFR 200.93, means a non-federal entity that receives a subaward from a pass-through entity to carry out part of a federal program, but does not include an individual that is a beneficiary of such program. A subrecipient may also be a recipient of other federal awards directly from a federal awarding agency.

6.0 REQUIREMENTS for ASSISTANCE AGREEMENTS

6.1. Scientific Data Management Plans

Applications for extramural research must include a Scientific Data Management Plan. A SDMP addresses public access to EPA-funded scientific research data. The SDMP describes all created and/or collected scientific research data and metadata (including data generated under subawards and contracts) funded in whole or in part by EPA, as well as plans for providing long-term preservation of, and public access to, the scientific research data and metadata, as appropriate. The SDMP should indicate that recipients will share, at a minimum, scientific research data and associated metadata underlying their scientific research journal publications funded in whole or in part by EPA. If appropriate, the SDMP should provide an explanation as to why data accessibility and/or preservation are not possible. The SDMP must describe how data sharing and preservation will enable validation of published results or how such results could be validated if data are not shared or preserved. SDMPs should reflect relevant standards and community best practices for data and metadata, and make use of community-accepted repositories, whenever practicable. SDMPs shall be evaluated by the program office as part of its application review process. If the SDMP changes during the conduct of the research (e.g., a SDMP originally indicated scientific research data would not be generated), a revised SDMP shall be provided to EPA incorporating the changes.

6.2. Submitting Author Manuscripts to the National Institutes of Health’s PubMed Central (PMC) Repository

When a journal does not submit a journal publication or an author manuscript associated with the journal publication directly to PMC, the recipient is responsible for making the author manuscript associated with the journal publication accessible to the public at no charge via PMC. When there is a joint publication, the EPA researcher will be responsible for making the author manuscript associated with the journal publication accessible in PMC.

The recipient must submit the author manuscript to PMC no later than the end of the embargo period of twelve months after journal publication. PMC then posts the manuscript on its site at the end of the embargo period, so it is accessible to the public. Recipients may petition EPA to extend the embargo period for publications in a specified scientific field. The petition must demonstrate that the existing embargo period is inconsistent with the objectives articulated in OSTP’s memorandum entitled “[Increasing Access to the Results of Federally Funded Research.](#)”

The National Institutes of Health Manuscript Submission (NIHMS) system is the manuscript submission system for all materials deposited in PMC and will be used for submissions of extramural scientific research journal publications and associated author manuscripts. Recipients are responsible for ensuring that either the journal publication or the author manuscript associated with the journal publication is deposited into PMC, so that the public may read, download and analyze the research results in digital form. Author manuscripts associated with journal publications may be deposited by the recipient directly or by the journal in PMC. EPA retains the right to require recipients to provide author manuscripts to EPA upon acceptance of the manuscript for journal publication.

6.3. Scientific Research Data and Metadata Requirements

Scientific research data underlying a journal publication are to be posted to a publicly accessible data repository by the recipient within 30 days of the date the journal publication or associated author manuscript becomes accessible to the public, whether made accessible by the journal at the time of publication or by PMC following the embargo period, unless (a) the dataset has already been made accessible to the public via public release or another sharing mechanism; or (b) the research data cannot be released due to one or more constraints, such as requirements to protect personal privacy, proprietary interest, property rights, national security, or dual use research of concern.

In addition, when a journal does not submit the metadata record for the journal publication or author manuscript associated with the journal publication to PMC via NIHMS entry, the recipient is responsible for entering the metadata record for the associated author manuscript via NIHMS entry when the manuscript is submitted to NIHMS. Metadata for the dataset underlying the journal publication will be made accessible by the recipient through EPA’s dataset metadata repository within 30 days of the date the journal publication or associated author manuscript becomes accessible to the public, whether made accessible by the journal at the time of publication or by PMC following the embargo period.

Data must be accessible in at least one machine-readable format, preferably a widely-used or open-standard format and should also be accompanied by machine-readable documentation (metadata), preferably based on widely used or international standards. Regardless of the format used, datasets must contain enough information to allow independent use (understanding, validation and analysis) of the data. Further, data should undergo quality review before they are made publicly accessible to safeguard against the release of personally identifiable or proprietary data.

6.4. EPA Researcher Involvement

When an assistance agreement supports a joint publication with an EPA researcher, the EPA researcher is responsible for: (1) depositing the author manuscript associated with the journal publication in PMC, if the journal doesn't submit the journal publication or author manuscript directly to PMC; and (2) providing the associated author manuscript's metadata record via NIHMS entry to be displayed through PMC when not previously submitted by the journal.

6.5. Costs

Reasonable, necessary and allocable costs for data management and public access as discussed in this Policy, must be included in extramural research applications in order for the costs to be considered allowable.

6.6. Compliance with Extramural Data Management Requirements

EPA program offices will ensure compliance with extramural data management requirements by requiring, as a term and condition of the assistance agreement, periodic reporting to project officers as a part of regular post-award management.

6.7. Past Performance

To the extent practicable and appropriate, past performance regarding public access shall be considered when reviewing applications for new extramural research awards. Non-compliance with the terms and conditions of an award regarding public access may be considered a negative indicator of past performance.

6.8. Compliance with Section 508 of the Rehabilitation Act of 1973

To the extent applicable, EPA shall ensure journal publications or associated author manuscripts, along with their relevant metadata, are stored in an archival solution that provides access for persons with disabilities consistent with Section 508 of the Rehabilitation Act of 1973. To achieve compliance, all assistance agreements include a term and condition¹ pertaining to electronic and information technology that references Sections 504 and 508 of the Act.

¹ Recipients are subject to the program accessibility provisions of Section 504 of the Rehabilitation Act, codified in 40 CFR Part 7, which includes an obligation to provide individuals with disabilities reasonable accommodations and an equal and effective opportunity to benefit from or participate in a program, including those offered through

6.9. EPA's License Rights

Recipients shall not sign agreements with publishers that restrict EPA's license rights under 2 CFR 200.315 or the requirements of this Policy.

7.0 REQUIREMENTS for CONTRACTS

7.1. Scientific Data Management Plans

Proposals for extramural research must include, as appropriate, a Scientific Data Management Plan. A SDMP addresses public access to EPA-funded scientific research data. The SDMP describes all created and/or collected scientific research data and metadata (including data generated under subcontracts) funded in whole or in part by EPA, as well as plans for providing long-term preservation of, and public access to, the scientific research data and metadata, as appropriate. The SDMP should indicate that contractors will share, at a minimum, scientific research data and associated metadata underlying their scientific research journal publications funded in whole or in part by EPA. If appropriate, the SDMP should provide an explanation as to why data accessibility and/or preservation are not possible. The SDMP must describe how data sharing and preservation will enable validation of published results or how such results could be validated if data are not shared or preserved. SDMPs should reflect relevant standards and community best practices for data and metadata, and make use of community-accepted repositories, whenever practicable. SDMPs shall be evaluated by the program office as part of its proposal review process. If the SDMP changes during the conduct of the research (e.g., a SDMP originally indicated scientific research data would not be generated), a revised SDMP shall be provided to EPA incorporating the changes.

7.2. Submitting Author Manuscripts to the National Institutes of Health's PubMed Central (PMC) Repository

When a journal does not submit a journal publication or an author manuscript associated with the journal publication directly to PMC, the contractor is responsible for making the author manuscript associated with the journal publication accessible to the public at no charge via PMC. When there is a joint publication, the EPA researcher will be responsible for making the author manuscript associated with the journal publication accessible in PMC.

The contractor (only if the requirement is in the contract) must submit the author manuscript to PMC no later than the end of the embargo period of twelve months after journal publication. PMC then posts the manuscript on its site at the end of the embargo period, so it is accessible to the public. Contractors may petition EPA to extend the embargo period for publications in a

electronic and information technology ("EIT"). In compliance with Section 504, EIT systems or products funded by this award must be designed to meet the diverse needs of users (e.g., U.S. public, recipient personnel) without barriers or diminished function or quality. Systems shall include usability features or functions that accommodate the needs of persons with disabilities, including those who use assistive technology. At this time, the EPA will consider a recipient's websites, interactive tools, and other EIT as being in compliance with Section 504 if such technologies meet standards established under Section 508 of the Rehabilitation Act, codified at 36 CFR Part 1194. While Section 508 does not apply directly to grant recipients, we encourage recipients to follow either the 508 guidelines or other comparable guidelines that concern accessibility to EIT for individuals with disabilities. Recipients may wish to consult the latest Section 508 guidelines issued by the U.S. Access Board or W3C's Web Content Accessibility Guidelines (WCAG) 2.0 (see <http://www.accessboard.gov/sec508/guide/index.htm>).

specified scientific field. The petition must demonstrate that the existing embargo period is inconsistent with the objectives articulated in OSTP's memorandum entitled "[Increasing Access to the Results of Federally Funded Research](#)."

The National Institutes of Health Manuscript Submission (NIHMS) system is the manuscript submission system for all materials deposited in PMC and will be used for submissions of extramural scientific research journal publications and associated author manuscripts. Contractors are responsible for ensuring that either the journal publication or the author manuscript associated with the journal publication is deposited into PMC, so that the public may read, download and analyze the research results in digital form. Author manuscripts associated with journal publications may be deposited by the contractor directly or by the journal in PMC. EPA retains the right to require contractors (only if the requirement is in the contract) to provide author manuscripts to EPA upon acceptance of the manuscript for journal publication.

7.3. Scientific Research Data and Metadata Requirements

Scientific research data underlying a journal publication are to be posted to a publicly accessible data repository by the contractor within 30 days of the date the journal publication or associated author manuscript becomes accessible to the public, whether made accessible by the journal at the time of publication or by PMC following the embargo period, unless (a) the dataset has already been made accessible to the public via public release or another sharing mechanism; or (b) the research data cannot be released due to one or more constraints, such as requirements to protect personal privacy, proprietary interest, property rights, national security, or dual use research of concern.

In addition, when a journal does not submit the metadata record for the journal publication or author manuscript associated with the journal publication to PMC via NIHMS entry, the contractor (only if the requirement is in the contract) is responsible for entering the metadata record for the associated author manuscript via NIHMS entry when the manuscript is submitted to NIHMS. Metadata for the dataset underlying the journal publication will be made accessible by the contractor (only if the requirement is in the contract) through EPA's dataset metadata repository within 30 days of the date the journal publication or associated author manuscript becomes accessible to the public, whether made accessible by the journal at the time of publication or by PMC following the embargo period.

Data must be accessible in at least one machine-readable format, preferably a widely-used or open-standard format and should also be accompanied by machine-readable documentation (metadata), preferably based on widely used or international standards. Regardless of the format used, datasets must contain enough information to allow independent use (understanding, validation and analysis) of the data. Further, data should undergo quality review before they are made publicly accessible to safeguard against the release of personally identifiable or proprietary data.

7.4. EPA Researcher Involvement

When a contract (only if the requirement is in the contract) supports a joint publication with an EPA researcher, the EPA researcher is responsible for: (1) depositing the author manuscript associated with the journal publication in PMC, if the journal doesn't submit the journal publication or author manuscript directly to PMC; and (2) providing the associated author manuscript's metadata record via NIHMS entry to be displayed through PMC when not previously submitted by the journal.

7.5. Costs

Reasonable, necessary and allocable costs for data management and public access as discussed in this Policy, must be included in extramural research proposals in order for the costs to be considered allowable.

7.6. Compliance with Extramural Data Management Requirements

EPA program offices will ensure compliance with extramural data management requirements by including the requirements in the program office's generated SOW or PWS and requiring periodic reporting to contracting officer representatives as a part of regular post-award management and record in the contract file.

7.7. Past Performance

To the extent practicable and appropriate, past performance regarding public access shall be considered when reviewing proposals for new extramural research awards. Non-compliance with the terms and conditions of an award regarding public access may be considered a negative indicator of past performance. Past performance information regarding policy compliance should be submitted as a performance issue in the Contractor Performance Assessment Reporting System (CPARS) and should be reported under the Regulations portion of the evaluation.

7.8. Compliance with Section 508 of the Rehabilitation Act of 1973

To the extent applicable, EPA shall ensure journal publications or associated author manuscripts, along with their relevant metadata, are stored in an archival solution that provides access for persons with disabilities consistent with Section 508 of the Rehabilitation Act of 1973.

7.9. EPA's License Rights

Contractors shall not sign agreements with publishers that restrict EPA's license rights under 48 CFR Subpart 27.4 (contract data rights) or the requirements of this policy.

8.0 REQUIREMENTS for FUNDS-OUT INTERAGENCY AGREEMENTS

8.1. Funds-out interagency agreements will adhere to OSTP's Memorandum entitled "Increasing Access to the Results of Federally Funded Research" and EPA's "Plan to Increase Access to Results of EPA-Funded Scientific Research." Agreements awarded to the Great Lakes Restoration Initiative Interagency Task Force agencies (as identified in Executive Order 13340) under the Clean Water Act section 118 (c)(7) are not subject to this order.

8.1.a. For interagency agreements relying on a cooperation statutory authority, or other agreements relying on a non-cooperation authority, where the agreement results in a joint publication with EPA, the following requirements apply:

8.1.a.i. If the journal doesn't submit the journal publication or associated author manuscript directly to PMC, the EPA will submit the associated author manuscript to PMC no later than the end of the embargo period of twelve months after journal publication. PMC then posts the manuscript on its site at the end of the embargo period, so it is accessible to the public. However, if the EPA and cooperating or servicing agency collectively agree the cooperating or servicing agency will make the article publicly accessible through their agency's public access process on a repository other than PMC, then the EPA program can decide whether or not they will also submit the associated author manuscript to PMC.

8.1.a.ii. The cooperating or servicing agency will notify the EPA project officer, when, and to what location, the scientific research data underlying the journal publication are posted. Notification is also required when scientific research data are not made publicly accessible due to either: the dataset already being made available to the public via public release or another sharing mechanism; or the data cannot be released due to one or more constraints, such as requirements to protect personal privacy, proprietary interest, property rights, national security, or dual use research of concern.

8.1.a.iii. The cooperating or servicing agency will notify the EPA project officer, when, and to what location, the metadata for the dataset underlying the journal publication are posted.

8.1.a.iv. If the journal does not submit the metadata record for the journal publication or associated author manuscript to PMC via NIHMS entry, the EPA will ensure public access to the associated author manuscript's metadata record via NIHMS entry when the manuscript is submitted to NIHMS. In cases where the cooperating or servicing agency posts the article to their own publications repository, they will be responsible for ensuring public access to the publication's metadata record on their repository.

8.1.a.v. The cooperating or servicing agency will confirm that the research funded by EPA is supported by a SDMP, describing how researchers will provide for long-term preservation of, and public access to, scientific research data in digital formats resulting from Federally-funded research, or explaining why long-term preservation and access are not possible.

8.1.b. For interagency agreements not relying on a cooperation authority, or where the agreement does not result in a joint publication with EPA, but a funded publication results, the following requirements apply:

8.1.b.i. The servicing agency will notify the EPA project officer, when, and to what location: a) the journal publication or the author manuscript associated with the journal publication is posted; b) the scientific research data underlying the journal publication are posted; c) the metadata for the journal publication or associated author manuscript are posted; and d) the metadata for the dataset underlying the journal publication are posted. Notification is also required when scientific research data are not made publicly accessible due to either: the dataset

already being made available to the public via public release or another sharing mechanism; or the data cannot be released due to one or more constraints, such as requirements to protect personal privacy, proprietary interest, property rights, national security, or dual use research of concern.

8.2 EPA will ensure compliance with extramural data management requirements by requiring, as a term and condition of the funds-out interagency agreement, periodic reporting to project officers as a part of regular interagency agreement management. The cooperating/servicing agency will report the status of publications and scientific research data generation and sharing.

8.3 The cooperating or servicing agency may petition EPA to extend the embargo period for publications in a specified scientific field. The petition must demonstrate that the existing embargo period is inconsistent with the objectives articulated in OSTP's memorandum entitled "[Increasing Access to the Results of Federally Funded Research.](#)"

9.0 RESPONSIBILITIES

9.1. Program Offices and Regional Offices

9.1.a. For extramural research covered by this Policy that is funded through EPA contracts, the program or regional office is responsible for representing in writing that there is a journal publication deliverable required in the SOW or PWS and that all appropriate EPA funding to support the requirement has been identified in the IGE/IGCE. The program office is responsible for providing the contracting officer a written assessment stating that a journal publication is a deliverable, the cost associated with the contractor's compliance with this policy is funded, and the program office will report the contractor's non-compliance to the COR. The program office will provide the written assessment of compliance with this policy; thereupon the contracting office should, if the requirement is in the SOW/PWS, include the appropriate language for competitive and non-competitive requirements pertaining to the following:

- (i) Inclusion of a SDMP as described in section 7.1 of this policy.
- (ii) In the case where a journal does not submit a journal publication or associated author manuscript to PMC, require that contractors make the author manuscript associated with the journal publication accessible to the public at no charge via the National Institutes of Health's PMC, no later than the end of the embargo period of twelve months after journal publication, as described in section 7.2 of this policy.
- (iii) Requirement for contractors to post scientific research data underlying the journal publication in a publicly accessible data repository, as described in section 7.3 of this Policy.
- (iv) In the case where the journal does not submit the metadata record for the journal publication or associated author manuscript to PMC via NIHMS entry, require that contractors provide the associated author manuscript's metadata record via NIHMS entry, as described in section 7.3 of this policy.

(v) Requirement for contractors to provide the metadata for the dataset underlying the journal publication to EPA's dataset metadata repository, as described in section 7.3 of this Policy.

(vi) Evaluation of the SDMP as part of the proposal review process.

(vii) Evaluation of the contractor's past performance in making journal publications or associated author manuscripts, and the associated underlying scientific research data and metadata, publicly accessible.

9.1.b. For extramural research covered by this policy that is funded through EPA assistance agreements, the program or regional office is responsible for including language in competitive announcements and program guidance for noncompetitive awards pertaining to the following:

(i) Inclusion of a SDMP as described in section 6.1 of this policy.

(ii) In the case where a journal does not submit a journal publication or associated author manuscript to PMC, require that recipients make the author manuscript associated with the journal publication accessible to the public at no charge via the National Institutes of Health's PMC, no later than the end of the embargo period of twelve months after journal publication, as described in section 6.2 of this policy.

(iii) Requirement for recipients to post scientific research data underlying the journal publication in a publicly accessible data repository, as described in section 6.3 of this Policy.

(iv) In the case where the journal does not submit the metadata record for the journal publication or associated author manuscript to PMC via NIHMS entry, require that recipients provide the associated author manuscript's metadata record via NIHMS entry, as described in section 6.3 of this policy.

(v) Requirement for recipients to provide the metadata for the dataset underlying the journal publication to EPA's dataset metadata repository, as described in section 6.3 of this Policy.

(vi) Evaluation of the SDMP as part of the application review process.

(vii) To the extent practicable and appropriate, the evaluation of the applicant's past performance in making journal publications or associated author manuscripts, and the associated underlying scientific research data and metadata, publicly accessible.

9.1.c. For extramural research covered by this policy that is funded through EPA funds-out interagency agreements relying on a cooperation statutory authority, or other agreements relying on a non-cooperation authority, where the agreement results in a joint publication with EPA, the program or regional office is responsible for the following:

(i) If the journal doesn't submit a journal publication or associated author manuscript directly to PMC, the EPA will submit the associated author manuscript to PMC no later than the end of the embargo period of twelve months after journal publication. However,

if the EPA and cooperating or servicing agency collectively agree the cooperating or servicing agency will make the article publicly accessible through their agency's public access process on a repository other than PMC, then the EPA program can decide whether or not they will also submit the associated author manuscript to PMC.

(ii) Request the cooperating or servicing agency provide when, and to what location, the scientific research data underlying the journal publication are posted. Notification is also required when scientific research data are not made publicly accessible due to either: the dataset already being made available to the public via public release or another sharing mechanism; or the data cannot be released due to one or more constraints, such as requirements to protect personal privacy, proprietary interest, property rights, national security, or dual use research of concern.

(iii) Request the cooperating or servicing agency provide when, and to what location, the metadata for the dataset underlying the journal publication are posted.

(iv) If the journal does not submit the metadata record for the journal publication or associated author manuscript to PMC via NIHMS entry, the EPA will ensure public access to the associated author manuscript's metadata record via NIHMS entry when the manuscript is submitted to NIHMS. In cases where the cooperating or servicing agency posts the article to their own publications repository, they will be responsible for ensuring public access to the publication's metadata record on their repository.

(v) Request the cooperating or servicing agency confirm that the research funded by EPA is supported by a SDMP, describing how researchers will provide for long-term preservation of, and public access to, scientific research data in digital formats resulting from Federally-funded research, or explaining why long-term preservation and access are not possible.

9.1.d. For extramural research covered by this policy that is funded through EPA funds-out interagency agreements not relying on a cooperation authority, or where the agreement does not result in a joint publication with EPA, but a funded publication results, the program or regional office is responsible for ensuring the servicing agency notifies the EPA of when, and to what location:

- (i) the journal publication or the author manuscript associated with the journal publication is posted;
- (ii) the scientific research data underlying the journal publication are posted;
- (iii) the metadata record for the journal publication or associated author manuscript are posted; and
- (iv) the metadata record for the dataset underlying the journal publication are posted.

9.1.e For extramural research covered by this policy that is funded through EPA assistance agreements, the program or regional office is responsible for including terms and conditions pertaining to the following:

(i) In the case where a journal does not submit a journal publication or associated author manuscript to PMC, require that recipients make accessible the author manuscript associated with the journal publication in PMC via NIHMS, no later than the end of the embargo period of twelve months after journal publication.

(ii) Requirement for recipients to post scientific research data underlying a journal publication in a publicly accessible data repository within 30 days of the date the journal publication or associated author manuscript becomes accessible to the public, whether made accessible by the journal at the time of publication or by PMC following the embargo period, unless (a) the dataset has already been made accessible to the public via public release or another sharing mechanism; or (b) the research data cannot be released due to one or more constraints, such as requirements to protect personal privacy, proprietary interest, property rights, national security, or dual use research of concern.

(iii) In the case where the journal does not submit the metadata record for the journal publication or associated author manuscript to PMC via NIHMS entry, require that recipients provide the associated author manuscript's metadata record via NIHMS entry when the manuscript is submitted to NIHMS.

(iv) Requirement for recipients to provide the metadata for the dataset underlying the journal publication to EPA's dataset metadata repository within 30 days of the date the journal publication or associated author manuscript becomes accessible to the public, whether made accessible by the journal at the time of publication or by PMC following the embargo period.

(v) Include in progress reports, the status of publications and scientific research data generation and sharing and discuss any deviation from the approved SDMP.

9.1.f. For extramural research covered by this policy that is funded through EPA funds-out interagency agreements, the program or regional office is responsible for including terms and conditions pertaining to the following:

(i) Include in progress reports, the status of publications and scientific research data generation and sharing.

(ii) For interagency agreements relying on a cooperation statutory authority, or other agreements relying on a non-cooperation authority, where the agreement results in a joint publication with EPA, the terms and conditions shall address the requirements described in 8.1.a.i. - 8.1.a.v. of this policy.

(iii) For interagency agreements not relying on a cooperation authority, or where the agreement does not result in a joint publication with EPA, but a funded publication results, the terms and conditions shall address the requirements described 8.1.b.i. of this policy.

9.2. Office of Acquisition Solutions

Upon receiving a coordinated and approved SOW or PWS containing all requirement language, or other appropriate request from the funding/requesting office that includes: (a) notification language regarding compliance with this Policy; (b) the specific deliverable requirements in the SOW or PWS; and (c) language that all appropriate EPA funding to support the requirement has been identified in the IGE/IGCE; the Office of Acquisition Solutions shall insert the appropriate language into the initial notice or solicitation (e.g., Request for Proposal) and resulting contract.

9.3 Office of Grants and Debarment

9.3.a. Headquarters and regional office award officials are responsible for ensuring that the terms and conditions pertaining to publications and data access described in section 9.1.e of this policy are included in assistance agreements.

9.3.b. Headquarters and regional office award officials are responsible for ensuring that the terms and conditions pertaining to publications and data access described in section 9.1.f of this policy are included in funds-out interagency agreements.

9.4 Office of Research and Development

The Office of Research Development, in consultation with the Office of Grants and Debarment and Office of Acquisition Solutions, and in coordination with contracts, grants, and program office stakeholders, will develop guidance as necessary, associated with implementing this policy.

10.0 WAIVERS

10.1 In response to written requests submitted by program or regional office approving officials, the Office of Grants and Debarment director or his or her designee, after consultation with EPA's Science Advisor, or his or her designee, may grant individual or class waivers from the requirements of the assistance and interagency agreement requirements of this policy based on unique programmatic considerations or where compliance would be impracticable. Waivers to extend the embargo period for publications in a specified scientific field will be addressed in accordance with section 6.2 of this policy for assistance agreements and section 8.3 of this Policy for interagency agreements.

10.2 In response to written requests submitted by program or regional office officials, the Science Advisor or his or her designee, in consultation with the Office of Acquisition Solutions director or his or her designee, and approval of the contracting officer, may grant individual or class waivers from the contractual requirements of this policy based on unique programmatic considerations or where compliance would be impracticable. Waivers to extend the embargo period for publications in a specified scientific field will be addressed in accordance with section 7.2 of this policy. Approved waivers must be provided by the requiring program office to the Approving/Awarding Official (e.g. contract specialist, etc.).

11.0 REVIEW

The Office of Research and Development will periodically review this policy to assess its effectiveness and will work with the Office of Grants and Debarment and Office of Acquisition Solutions to issue supplemental policy/guidance, as may be necessary.