

PUBLIC HEALTH SERVICE
MATERIAL TRANSFER AGREEMENT

This Material Transfer Agreement ("MTA") has been adopted for use by the National Institutes of Health ("NIH"), the Food and Drug Administration ("FDA"), and the Centers for Disease Control and Prevention ("CDC"), collectively referred to herein as the United States Public Health Service ("PHS") within the Department of Health and Human Services ("DHHS"), in all transfers of research material ("Research Material") whether PHS is identified below as its Provider or Recipient.

Provider: National Institute of Environmental Health Sciences (NIEHS) an institute of the NIH

Provider Investigator: Mamta Behl

Recipient: US Environmental Protection Agency, Center for Computational Toxicology and Exposure (CCTE)

Recipient Investigator: Stephanie Padilla

1. Provider agrees to transfer to Recipient's Investigator named below the following Research Material:

A list identifying selected chemicals to be tested in attached Appendix A

2. THIS RESEARCH MATERIAL MAY NOT BE USED IN HUMAN SUBJECTS. The Research Material will only be used for research purposes by Recipient's investigator in his/her laboratory, for the research project described below, under suitable containment conditions. This Research Material will not be used by for-profit recipients for screening, production or sale, for which a commercialization license may be required. Recipient agrees to comply with all Federal rules and regulations applicable to the Research Project and the handling of the Research Material.

3. This Research Material will be used by Recipient's investigator solely in connection with the following research project ("Research Project") described with specificity as follows (use an attachment page if necessary):

OECD Expert Group on Developmental Neurotoxicity (DNT): IATA CASE Zebrafish Group

Specifics: the compounds will be used in order to assess Developmental Neurotoxicity (DNT) in zebrafish embryos. This project will involve several laboratories testing the same set of compounds and will help to establish reproducibility of protocols for developmental neurotoxicity testing in zebrafish. Chemicals will be sent blinded to the researcher. Research Material will be used to generate data as part of a OECD Zebrafish Expert group case study. Data will be received by the NTP following study completion

4. In all oral presentations or written publications concerning the Research Project, Recipient will acknowledge Provider's contribution of this Research Material unless requested otherwise. To the extent permitted by law, Recipient agrees to treat in confidence, for a period of three (3) years from the date of its disclosure, any of Provider's written information about this Research Material that is stamped "CONFIDENTIAL", except for information that was previously known to Recipient or that is or becomes publicly available or which is disclosed to Recipient without a confidentiality obligation. Any oral disclosures from Provider to Recipient shall be identified as being CONFIDENTIAL by written notice delivered to Recipient within thirty (30) days after the date of the oral disclosure. Recipient may publish or otherwise publicly disclose the results of the Research Project, but if Provider has given CONFIDENTIAL information to Recipient such public disclosure may be made only after Provider has had thirty (30) days to review the proposed disclosure to determine if it includes any CONFIDENTIAL information, except when a shortened time period under court order or the Freedom of Information Act pertains. The Recipient agrees to transfer to Provider Investigator all data and data analysis resulting from use of the Research Material during the

Research Project.

5. This Research Material represents a significant investment on the part of Provider and is considered proprietary to Provider. Recipient's investigator therefore agrees to retain control over this Research Material and further agrees not to transfer the Research Material to other people not under her or his direct supervision without advance written approval of Provider. Provider reserves the right to distribute the Research Material to others and to use it for its own purposes. When the Research Project is completed, the Research Material will be disposed of, if directed by Provider.

6. This Research Material is provided as a service to the research community. IT IS BEING SUPPLIED TO RECIPIENT WITH NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Provider makes no representations that the use of the Research Material will not infringe any patent or proprietary rights of third parties.

7. Recipient shall retain title to any patent or other intellectual property rights in inventions made by its employees in the course of the Research Project. Recipient agrees not to claim, infer, or imply endorsement by the Government of the United States of America (hereinafter referred to as "Government") of the Research Project, the institution or personnel conducting the Research Project or any resulting product(s). Unless prohibited by law from doing so, Recipient agrees to hold the Government harmless and to indemnify the Government for all liabilities, demands, damages, expenses and losses arising out of Recipient's use for any purpose of the Research Material.

8. The undersigned Provider and Recipient expressly certify and affirm that the contents of any statements made herein are truthful and accurate.

9. This MTA shall be construed in accordance with Federal law as applied by the Federal courts in the District of Columbia.

PROVIDER INFORMATION and AUTHORIZED SIGNATURE

[Redacted Signature]

Signature of Authorized Official

Date

Name: Sharon Soucek, Ph.D.
Title: Director, Office of Technology Transfer
Address: 111 T.W. Alexander Drive
Research Triangle Park, NC 27709
NIEHSOTT@nih.gov

RECIPIENT INFORMATION and AUTHORIZED SIGNATURE

[Redacted Signature]

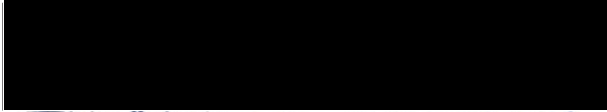
Signature of Authorized Official

Date

1/9/2020

Name: Russell Thomas, Ph.D.
Title: Director, Center for Computational Toxicology and Exposure
Address: 109 T.W. Alexander Dr.
Research Triangle Park, NC 27709
thomas.russell@epa.gov

Certification of Recipient Scientist: I have read and understood the conditions outlined in this Agreement and I agree to abide by them in the receipt and use of the Research Material.



Recipient Scientist
Stephanie Padilla, Ph.D.

1/9/20
Date

Appendix A

Compound	CASRN
2-Ethylhexyl diphenyl phosphate	1241-94-7
3,3',5,5'-Tetrabromobisphenol A	79-94-7
Acetamiprid	135410-20-7
Aldicarb	116-06-3
Allethrin	584-79-2
Benomyl	17804-35-2
Chloramben	133-90-4
Chlorpyrifos	2921-88-2
Cypermethrin	52315-07-8
Deltamethrin	52918-63-5
Diazinon	333-41-5
Dieldrin	60-57-1
Dimethoate	60-51-5
Heptachlor	76-44-8
Kepone	143-50-0
Maneb	12427-38-2
Methyl parathion	298-00-0
Nicotine	54-11-5
Parathion	56-38-2
Permethrin	52645-53-1
tert-Butylphenyl diphenyl phosphate	56803-37-3
Thiacloprid	111988-49-9
Trichlorfon	52-68-6
Tris(methylphenyl) phosphate	1330-78-5
Tri-o-cresyl phosphate	78-30-8
Triphenyl phosphates isopropylated	68937-41-7
Tris(1,3-dichloro-2-propyl) phosphate	13674-87-8
Tris(2-chloroethyl) phosphate	115-96-8
Tris(2-chloroisopropyl)phosphate	13674-84-5