MATERIALS TRANSFER AGREEMENT

U.S. Environmental Protection Agency (EPA)
Office of Research and Development (ORD)
National Center for Computational Toxicology (NCCT)

Organization's Legal/Official Name:

The Dow Chemical Company (DOW)

- 1. EPA agrees to transfer to DOW's Investigator named below the following Research Material:
- A list identifying selected chemicals from the ToxCast[™] chemical library to be tested by DOW.
- In vitro assay data derived from the ToxCast™ Program. This data is derived from chemicals analyzed using a variety of high throughput assay techniques. Below, this is referred to as the "ToxCast™ Data".
- In vivo whole animal toxicology summary data derived from the EPA Toxicology Reference Database (ToxRefDB). Below, this is referred to as the "ToxRefDB Data."
- Summary descriptions of the individual data sets.
- Individual subsets of this data will be delivered to DOW after they have been prepared for use at the EPA and cleared for release to DOW.

DOW agrees to transfer to the EPA Investigator named below the data resulting from the tests, as described below.

- 2. The Research Material will be used only for research purposes by DOW's investigator in his/her laboratory, for the research project described below, under suitable containment conditions. DOW agrees to comply with all Federal rules and regulations applicable to the Research Project and the handling of the Research Material.
- 3. The Research Material does not include specimens collected from human subjects.
- 4. The EPA Research Material will be used by DOW's investigator solely in connection with the following research projects described with specificity as follows: DOW will procure and test approximately 10 ToxCast chemicals, consisting of chemical samples prepared as solutions in dimethyl sulfoxide, and benchmark controls, in the rat and rabbit whole embryo culture assay and the rat and rabbit aortic explant assay. This work is targeted for completion in 2011. The results will be compared to existing animal

tests and to the results from ToxCast assays. DOW will provide EPA the data resulting from the tests. The testing results will help both EPA and DOW define the pathways that are commonly involved in a wide range of toxicities. The results will also provide more data that will help determine the ability for the ToxCast, whole embryo culture and aortic ring assays to predict chemical toxicity to animals and humans.

- 5. In all oral presentations or written publications concerning the Research Project, DOW will acknowledge EPA's contribution of this Research Material, if used, unless requested otherwise. To the extent permitted by law, DOW agrees to treat as confidential, any of EPA's written information about this Research Material that is stamped "CONFIDENTIAL" for a period of three (3) years from the date of the disclosure. The foregoing shall not apply to information that is or becomes publicly available or which is disclosed to DOW without a confidentiality obligation. Any oral disclosures from EPA to DOW which EPA wishes to be treated as confidential shall be identified as being Confidential at the time of the disclosure and by written notice delivered to DOW within thirty (30) days after the date of the oral disclosure. DOW may publish or otherwise publicly disclose the results of the Research Project, but if EPA has given Confidential information to DOW, such public disclosure may be made only after EPA has had thirty (30) days to review the proposed disclosure to determine if it includes any Confidential information, except when the shortened time period is pursuant to a court order or to the extent such review period is permitted by law.
- 6. DOW will provide to the EPA all Testing Results obtained by DOW using the selected compounds. EPA acknowledges that DOW owns all Testing Results and shall make use of such Testing Results for any purpose, and DOW acknowledges that the EPA will make such Testing Results freely available to the public upon review and approval by DOW. Both EPA and DOW agree that pending successful outcomes of the experiments, it is the intent of the parties to publish at least two papers, with each partner having lead authorship on one of them.

derived	Testing Results being provided back to EPA that include specimens or data or collected from human subjects? Yes – Go to item #7(a). No – Skip to item #8.	а
	(a). Do these Testing Results include specimens or data derived or collectrom fetuses, children, pregnant women, or nursing women? Yes No	ted

7(b). Were these Testing Results obtained under a protocol that was reviewed and approved by an Institutional Review Board (IRB) that operated in accordance

with the requirements of EPA Regulation 40 CFR 26, HHS Regulation 45 CFR 46, or any other Federal Regulation for the protection of human research subjects?
Yes (Please indicate the applicable Regulation here and provide copies of the protocol and IRB approval documents.)
No (Please provide explanation with documentary support as appropriate.)
7(c). Can the Provider of the Testing Results identify the subjects directly or through identifiers (codes) linked to the subjects?
Yes – EPA's use of the Research Material may be human subjects research subject to 40 CFR 26. Go to item #7(d).
No – EPA's use of the Research Material is not human subjects research subject to 40 CFR 26. Skip to item #8.
7(d). Is the Provider of the Testing Results prohibited by this agreement from releasing information to the EPA that might allow the identification of any of the subjects, including but not limited to the key to any existing code? Yes – EPA's use of the Research Material is not human subjects research subject to 40 CFR 26. Skip to item #8. No – EPA's use of the Research Material may be human subjects research subject to 40 CFR 26. Go to item #7(e).
7(e). Is the Research Material publicly available? Yes – EPA's use of the Research Material is human subjects research that is exempt from 40 CFR 26. No – EPA's use of the Research Material is human subjects research that may be subject to 40 CFR 26 and must be further evaluated accordingly by the EPA Human Subjects Review Official.

- 8. This Research Material represents a significant investment on the part of EPA and is considered proprietary to EPA. DOW'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 his/her direct supervision without advance written approval of EPA. EPA 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 returned to the EPA or disposed, if directed by EPA.
- 9. This Research Material is provided as a service to the research community. It is being supplied to DOW with no warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose. EPA makes no representations that

the use of the Research Material will not infringe any patent or proprietary rights of third parties.

- 10. DOW shall retain title to any patent or other intellectual property rights in inventions made by its employees in the course of the Research Project. However, if said inventions contain any portion of the Research Material, are derived from the Research Material, or could not have been produced but for the use of the Research Material, DOW agrees to contact the EPA to determine what ownership interests, if any, the EPA may have, and, where applicable, to negotiate in good faith the terms of a commercial license. Inventorship for a patent application or a commercialized product based on said inventions shall be determined according to United States patent law.
- 11. DOW 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).
- 12. When EPA receives Testing Results in accordance with Sections 4 and 6, from DOW, DOW will not be liable to EPA for any claims or damages arising from EPA's use of the Testing Results.
- 13. This Agreement shall begin on the date of its execution and continue for twenty-four (24) months thereafter, and may be extended by mutual written amendment signed by both parties. The EPA or DOW shall have the right to terminate this Agreement at any time if either the EPA or DOW breaches any of the terms of this Agreement. Upon termination, DOW shall return to the EPA all unused portions of the Research Materials upon written request of the EPA. DOW may retain one copy of the Confidential Information solely for the purpose of monitoring its obligations under this Agreement.
- 14. All notices pertaining to or required by this Agreement shall be in writing and shall be signed by an authorized representative and shall be sent by mail or commercial courier addressed as follows:

EPA's Contact Information

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Either party may change such address by notice given to the other party in the manner set forth above.

15. Paragraphs 2, 8, 11 and 12 shall survive termination.