Appendix 7.1

Chemistry Specifications for Chemistry Services Contractors

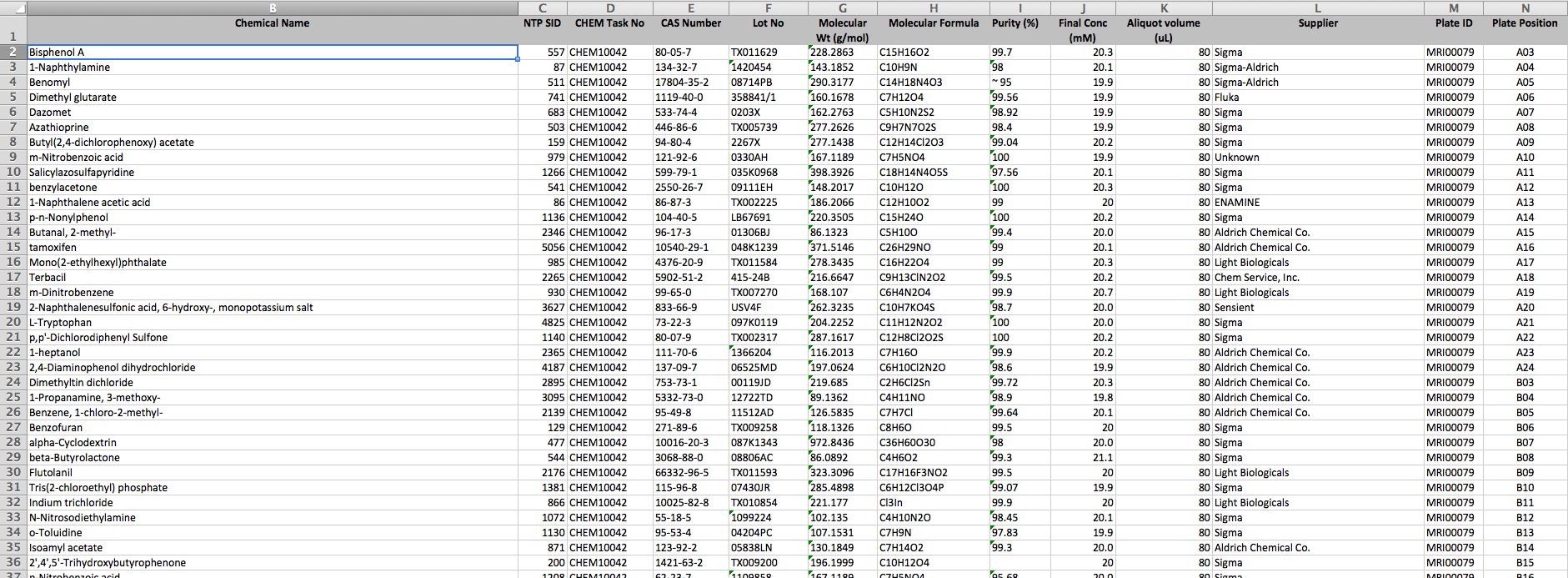
National Toxicology Program

Examples of HTS Plate Maps and Structure Files

September 12, 2013

1. Plate Map
   1. A partial plate map is shown in Figure 1.

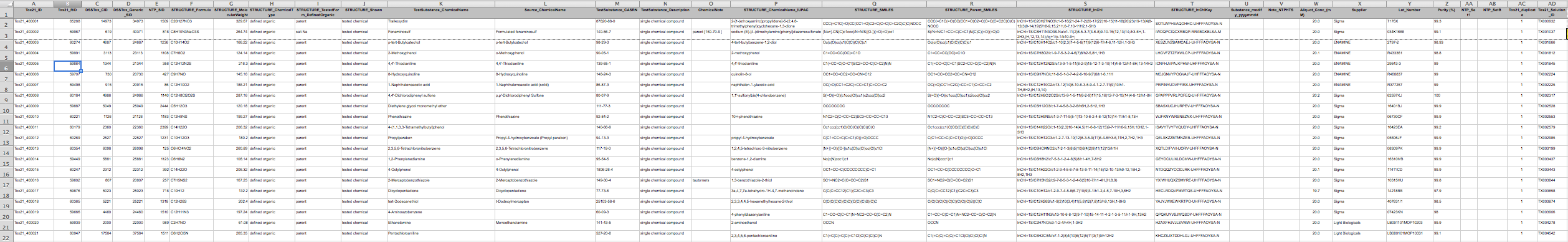
Figure 1.



* 1. Field names (column titles) and definitions are listed below:
     1. Chemical Name
     2. NTP substance identification number (SID)
     3. CHEM Task No: Number assigned to the handling assignment by the NTP IMS.
     4. CAS Number
     5. Lot number
     6. Molecular Wt (g/mol): Molecular weight of the chemical used to calculate the molarity of the dispensed solution.
     7. Molecular formula
     8. Purity (%): Supplier or as determined, if available.
     9. Final Conc (mM): Prepared concentration of the solution in the well.
     10. Aliquot volume (uL): Volume dispensed into the well
     11. Supplier
     12. Plate ID
     13. Plate Position: Row and column identifiers

1. Structure File
   1. A partial structure file in Excel format is shown in Figure 2.

Figure 2.



* 1. Field names (column titles) are listed below:
     1. Tox21\_ID
     2. Tox21\_RID
     3. DSSTox\_CID
     4. DSSTox\_Generic\_SID
     5. NTP\_SID
     6. STRUCTURE\_Formula
     7. STRUCTURE\_MolecularWeight
     8. STRUCTURE\_\_ChemicalType
     9. STRUCTURE\_TestedForm\_DefinedOrganic
     10. STRUCTURE\_Shown
     11. TestSubstance\_ChemcialName
     12. Source\_ChemicalName
     13. TestSubstance\_CASRN
     14. TestSubstance\_Description
     15. ChemicalNote
     16. STRUCTURE\_ChemicalName\_IUPAC
     17. STRUCTURE\_SMILES
     18. STRUCTURE\_Parent\_SMILES
     19. STRUCTURE\_InChi
     20. STRUCTURE\_InChiKey
     21. Substance\_modify\_yyymmdd
     22. Note\_NTPHTS
     23. Aliquot\_Conc\_(mM)
     24. Supplier
     25. Lot\_Number
     26. Purity (%)
     27. NTP\_Set1
     28. NTP\_SetB
     29. Tox21\_duplicate
     30. Tox21\_Solution\_ID
  2. Definitions for fields and example structure files can be found on the DSSTox website at: <http://www.epa.gov/ncct/dsstox>.