STATE OF CALIFORNIA
Department of Toxic Substances Control

Health and Safety Code Section 57019 Chemical Information Call-in Information for Nanometals, Nanometal Oxides, and Quantum Dots
December 2010

This enclosure is provided for your convenience. You may provide the requested information in writing, and attaching any supplementary materials or explanatory information, in letter or report form.

SECTION A: CHEMICAL(S) (check each one which applies for your company)
☐ Nano Silver ☐ Nano Titanium Dioxide ☐ Nano Cerium Oxide
☐ Nano Zero Valent Iron ☐ Nano Zinc Oxide ☐ Quantum Dot(s)

SECTION B: BUSINESS IDENTIFICATION INFORMATION (check one and complete items 1 - 10)
☐ Sole Owner ☐ Corporation ☐ Limited Liability Company (LLC) ☐ Limited Liability Partnership (LLP) ☐ Unincorporated Business Trust
☐ Spouses' Co-ownership ☐ Registered Domestic Partnership ☐ General Partnership ☐ Limited Partnership ☐ Other: (describe)

1. Name of Sole Owner, Corporation, Partnership, Institution, Other:

2. Business Trade Name ("Doing Business As," if any)

3. Business Address (physical location of your business: street number and name, city, state, country, zip or postal code)

4. Mailing Address (street name and number, P.O. box, city, state, country, zip or postal code, if different from 3)

5. Business Website Address(es):

6. Name of Owner, Responsible Corporate Officer, Partner, Other:

7. Contact Information for Person in 6 above.
Name: ______________________ Title: ______________________
Business Telephone: ______________________ Email: ______________________

8. Number of Employees (California employees):

9. NAICS Code(s) for this business: Primary: Other: Other:

10. Nano Chemical Business Type: (check applicable) ☐ Manufacturer ☐ Importer ☐ Researcher

SECTION C: CERTIFICATION (FOR THIS COMPLETE SUBMITTAL)
I am duly authorized to prepare and submit this information, as a formal response to the request pursuant to Health and Safety Code section 57019(d)(1), and certify the information and statements made herein, and in the attachments, are correct to the best of my knowledge and belief.

Name: ______________________ Signature: ______________ Date: ______________
###SECTION D: NANOMATERIAL CHEMICAL AND PHYSICAL PROPERTIES

**PRODUCT / PRODUCTION INFORMATION**

NANO CHEMICAL NAME: (Use a separate page for each unique chemical.)

COMMERICAL NAME(S):

ANNUAL PRODUCTION VOLUME:

PRODUCTION METHOD(S):

IDENTIFICATION OF THE SUPPLIER(S):

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>VALUE / RANGE (include units)</th>
<th>NAME OF ANALYTICAL METHOD(S)</th>
</tr>
</thead>
</table>

**PHYSICAL PROPERTIES**

SHAPE (MORPHOLOGY)

DENSITY

SURFACE AREA

<table>
<thead>
<tr>
<th>PARTICLE SIZE DISTRIBUTION</th>
<th>Air</th>
<th>Liquid</th>
<th>Solid / Powder</th>
</tr>
</thead>
</table>

OTHER (Specify)

**CHEMICAL PROPERTIES**

CHEMICAL COMPOSITION

SURFACE MODIFICATION (COATING, FUNCTIONALIZATION)

PURITY

SURFACE CHARGE

<table>
<thead>
<tr>
<th>DISPERSION</th>
<th>Air</th>
<th>Liquid</th>
<th>Solid</th>
</tr>
</thead>
</table>

IDENTIFYING AND DETERMINING CONCENTRATION OF NANO CHEMICAL, IT'S METABOLITES, AND DEGRADATION PRODUCTS IN SPECIFIED MATRICES:

Water, Air, Soil, Sediment, Sludge, Chemical Waste, Fish, Blood, Adipose Tissue, Urine, Other (specify)

SOLUBILITY

Water Solubility

Solubility in Organic Solvent

**N-OCTANOL-WATER PARTITION COEFFICIENT**

Flammability

Explosiveness

Oxidizing Properties

Oxidation Reduction Potential

Storage Stability and Reactivity (Container Material)

Stability to Thermal, Sunlight, and Metal(s)
Notes for Section D:

Indicate “Unknown” if you do not know one of the requested parameters or information items. Indicate “To Be Developed” if your company has not yet developed the information. Indicate “Not Applicable” only if the specific parameter does not apply for your nano chemical.

1. Specify the units (dimensions) for each parameter for which you are reporting values (test results), ranges, and analytical test methods.

2. Specify the analytical test method(s) which you currently use for each parameter and report the value or range for your nano chemical(s). For each method, provide the complete reference (or provide a copy of the complete method). For example, see USEPA 289.2 (1978), ARB Method 310, ASTM E01, OECD 201, as examples of established analytical test methods for chemicals. If you have developed an internal method, or engaged a consultant or external laboratory for a unique or custom test method, provide complete information regarding sample preparation, test protocol(s), limitations, accuracy, precision, bias, required special conditions, resolution limit, applicable matrices, etc. List the consultants, external laboratory personnel, and others with direct knowledge of specialized methods which you have applied for your nano chemical.

3. Describe the extent to which particles agglomerated (i.e., are held together in groups or clusters by attractive inter-particle forces or distribution of particles in the specific system) under “Dispersion.” Specify this parameter for three matrices: air, liquid, and solid.

SECTION E:

Provide a copy of your Globally Harmonized System (GHS) Safety Data Sheet (SDS), if you have prepared one.

SECTION F:

For each nanomaterial you produce or import, describe the analytical test method(s) that you use, or plan to use, to sample, prepare, and analyze a specific matrix to determine the identity and concentration of each specified nanomaterial. Use a separate page to describe the procedure for each, individual matrix, which must include water, air, soil, sediment, sludge, chemical waste, fish, blood, adipose tissue, and urine. Include the information requested in Section D above.