The EPP technical specifications shown below were extracted from the solicitation, RFP DGS-56374, released in April 2008.

16. Training on Recycling/Reuse (MANDATORY)

Training performed under any contract resulting from this RFP must include information on proper end of life management, disposal, recycling and/or reuse of used equipment.

36. Reporting Requirements (MANDATORY)

D) Environmentally Preferable Products (EPP) and Specifications Report

During contract implementation and on-going product monitoring, contractor(s) will identify any contract items applicable to EPP reporting. Contractor(s) must report on compliance with the environmental specifications as well as information on the proper EPP products purchased under the Contract Agreement. Such reports showing all EPP products purchased will be submitted semi-annually, by the last day of January and by the last day of July. The EPP products usage report shall be broken down by item, and then broken down again by authorized purchaser and authorized purchaser billing code. The State's Contract Manager or authorized purchaser (with the concurrence of the State's Contract Manager) may request these reports at any time.

62. End of Life Management (MANDATORY Scored 20 points)

A. End of Life Management must be in compliance with any procedure or policy set forth by State Administrative Manual Section 3520 (12-03).

B. Bidder(s) agree to provide take back and management services for end of life electronic products. Bidder(s) must provide a response to this requirement with a detailed proposal and plan in consideration of the criteria below. The proposal will be scored on the scope, take back provisions, and disposal methodology. This can be accomplished through a contractual provision whereby the seller agrees to be responsible for taking back the products and providing for appropriate re-use or recycling when the authorized purchaser no longer needs the product.

Bidder(s) shall provide take back programs that comply with the following:

- Hazardous electronic waste will not be sent to landfills for disposal;
- Hazardous electronic waste will not be exported to developing countries;
- Recycling will be handled by a responsible recycling operation with an environmental management system in place;

- Any batteries containing heavy metals, such as lead, cadmium, lithium, or silver, are properly removed and either recycled or managed as a hazardous waste before the unit is disposed;
- Bidder(s) offer methods that will allow for the return of used equipment to the original manufacturer or third party entity for reuse or recycling, preferably at no cost to authorized purchaser.

Such take-back methods may include but are not limited to:

1. One-for-one exchange of equipment offered by, or previously purchased from the Bidder(s) upon purchase of new equipment from said bidder(s).
2. Collection of any used computer equipment by Contractor(s) or sub-Contractor(s) for reuse or recycling, preferably including provisions to continue recycling operations should a sub-Contractor(s) no longer be able to perform such activities.
3. Coupon system for pre-paid take-back at permanent collection centers, such as, but not limited to, Goodwill Industries, Salvation Army, and Universities.
4. If take back provisions are proposed, authorized purchasers must follow applicable laws, procedures and guidelines relating to disposing of equipment prior to invoking disposal procedures.

In response to this requirement, the proposal shall describe the End of Life Management and Disposal being proposed as part of this bid. Any costs associated with the fulfillment of this requirement will be assessed in the Cost Evaluation. Any applicable cost, if bid, shall apply as a single fee per server system purchased and/or recovered. If a fee is proposed, the ordering agency will have the option to select the bidders End of Life Management and Disposal program by designating the fee on the respective purchase order. If no cost proposed, the bidder is committing to the End of Life and Disposal at no additional cost to the State and the ordering agency will have the option to select the bidders program at the time of order.

68. Environmental Criteria (MANDATORY. Scored 20 points)

The primary environmental objective of this RFP is to procure equipment, which uses less energy over time, thus decreasing pollution and energy costs and represents a reduced negative effect on human health and the environment. It is the **desire** of the State to allow eligible authorized purchasers to procure products and services, which help to minimize the environmental impact resulting from the use and disposal of these products. Such products, referred to as "Environmentally Preferable Products" (EPPs), include, but are not limited to, those which contain recycled content, conserve energy or water, minimize waste or reduce the amount of toxic material used and disposed of.

Computers and other electronics are a growing focus of environmentally preferable purchasing activities due to their high prominence in the waste stream, their numerous hazardous chemical constituents, and their significant energy use. The billions of dollars required to properly dispose of this electronic waste will almost entirely come from State and local agencies' budgets. Moreover, when these products are improperly disposed of they can release heavy metals and other hazardous substances that contaminate groundwater and pollute the air.

The State has determined that there are a number of potential environmental and public health impacts related to the manufacture, assembly, use, and disposal of computer equipment. In keeping with the environmental and public health goals of California, the State is interested in promoting bidder(s) and products, which either have or will address some or all of these concerns.

It is mandatory that bidder(s) describe the EPP benefits of the goods offered that provide for environmentally sound manufacturing, materials content, and energy conservation measures. The bidder(s) shall describe any processes, materials, operations and certifications that provide for Environmentally Preferred Product (EPP) utilizations. The bid shall contain any references to certifications, industry standards or other recognized criteria (such as Energy Star, RoHS, EPEAT, TCO, etc.) that aids in substantiating EPP features of the products bid. The State recognizes that products bid in the PC Server industry are not commonly certified, however, the bidder's proposal will be assessed and the points awarded based upon the extent of EPP features. Bidder's are encouraged to compare the bid products with industry standards and practices; and document the bid respectively in response to this requirement. It is desirable that the PC Servers have any of the following characteristics:

Energy efficiency may include but are limited to the following;

- U.S. Environmental Protection Agency's and Department of Energy's ENERGY STAR guidelines. (http://www.energystar.gov/).
- Comparative specifications of similar products that illustrate energy saving features.

Environmental may include but are not limited to the following:

- European Union's Directive --Restriction of Hazardous Substances --which requires the phase out of lead, mercury, hexavalent chromium, cadmium and certain brominated flame retardants (PBBs and PBDEs).
- Traces of cadmium not to exceed 50 ppm in homogeneous materials.
- Low threshold for amount of mercury used in light sources i.e., maximum average of 3.0 mg mercury per lamp.
- No intentional added hexavalent chromium. Traces of hexavalent chromium may not exceed 500 ppm in homogeneous materials.

- Plastic parts > 25 g free from flame retardants (not more than 0.1% of total weight) that are classified as dangerous substances under European Council Directive 67/548/EEC.
- With the exemption of technically unavoidable impurities, batteries and accumulators (internal to the system) may not contain any lead, cadmium or mercury. Such impurities may not exceed the limiting values as specified in the European Council and Commission Directives (91/157/EEC and 98/101/EEC).
- No polyvinyl chloride (PVC) in parts >25 g.
- Products that contain on average a minimum of 10% postconsumer recycled plastic, measured as a percentage of total plastic (by weight) in the product.
- Products that contain a higher content of postconsumer recycled plastic, i.e., on average a minimum of 25% postconsumer recycled plastic, measured as a percentage of total plastic (by weight) in the product.
- Products that contain on average a minimum of 10% renewable/biobased plastic, measured as a percentage of total plastic (by weight) in the product.
- Use of only one plastic type material in each plastic enclosure part > 100 g.
- Plastic enclosures that do not contain molded-in or glued-on metal unless metal inserts are easy to remove by one person alone with commonly available tools.
- Products consisting of a minimum of 90% reusable or recyclable materials and components. The materials and components must be reusable or recyclable within the current infrastructure and using demonstrated technologies.
- Plastic parts >25 g that are manually separable by one person alone with commonly available tools.
- Plastic components >25 g that are marked with a material code in accordance with the identification and marking requirements of ISO 11469:2000.
- Products that have a modular design, for example, major components can be changed.
- Spare parts and / or compatible replacement parts that are available five years after end of production. Information on how to obtain replacement parts shall be provided to user.
- Qualification to a new ENERGY STAR specification in advance of effective date.
- Accessory for powering product using renewable energy should be commercially available for purchase with the product.
- Products shipped with a standard component (either internal or external) that allows for use of renewable energy to power the product.
- Packaging to meet or exceed the minimum postconsumer content for respective packaging in the U.S. EPA Comprehensive Procurement Guidelines (CPG) over the course of a year using a weighted average.
- It is desirable that bidder(s) use recyclable, nontoxic packaging and various source reduction efforts as follows:

1. Minimize quantity and weight of any non-recyclable packaging and shipping material; e.g., use molded paper or cardboard substitutes for polystyrene and Styrofoam.
2. Use reduced and/or recycled packaging for shipping, such as boxes that contain a minimum of 35% post-consumer fiber for all corrugated cardboard.
3. Provide product user manuals that can be easily recyclable (no difficult binding) and printed on recycled content paper (with at least 30% post-consumer fiber content).

- It is desirable that manufacturer offer a take-back program for free where the packaging material can be collected/returned to manufacturer or recycler for reuse or recycling.
- It is desirable that manufacturer provide a reusable packaging process that reuses the packaging for the same or similar product, at a competitive price. Manufacturer designs packaging for a minimum of five reuses.
- It is desirable that at a minimum, electronics manufacturers/vendors should demonstrate that they are complying globally with the European Union's WEEE Directive.
- It is desirable that bidder(s) address ISO 14001 certification and if they are certified.

- At a minimum, electronics manufacturers shall demonstrate that they are complying globally Bidder(s) shall offer electronic products that use recycled content and produce products that can easily be recycled.
- At a minimum, electronics manufacturers/vendors shall demonstrate that they are complying globally with the European Union's WEEE Directive, which requires manufacturers to recycle or reuse more than half of their old equipment on the market by 2006.
- Bidder(s) shall offer electronic products that have been certified by independent third party eco-labeling programs, such as TCO, Blue Angel, etc.
- Bidder(s) shall address ISO 14001 certification and if they are certified.
- Bidder(s) shall offer electronic products with labels containing consumer information on the hazardous materials contained in the electronic equipment.
- Bidder(s) shall use recyclable, nontoxic packaging and various source reduction efforts as follows:
- Use reduced and/or recycled packaging for shipping, such as boxes that contain a minimum of 35% post-consumer fiber for all corrugated cardboard.
- Minimize quantity and weight of any non-recyclable packaging and shipping material; e.g., use molded paper or cardboard substitutes for polystyrene and Styrofoam.
- Provide product user manuals that can be easily recyclable (no difficult binding) and printed on recycled content paper (with at least 30% post-consumer fiber content).
- Bidder(s) shall provide product upgradeability options, such as, but not limited to, expandable memory. The product shall be easily upgraded.

Installation, service and any other technical support performed under any contract resulting from this eRFP must include the proper configuration of power management features according to the current ENERGY STAR specifications for that class of equipment at the time of installation, service or any other technical support.

69. Recycling Of Packaging Materials (MANDATORY)

Bidder(s) shall recycle shrink-wrap, foam and other types of packaging. To comply with this requirement Bidder(s) must provide information, following award, on the following:

- Provide a migration plan to the use of recyclable, nontoxic packaging
- Use recycled-content packing materials when feasible.
- Provide recycled-content plastic for equipment housing.