

**RD&D PERMIT, CERTIFICATE OF AUTHORITY TO
OPERATE (CAO) A RESEARCH, DEVELOPMENT &
DEMONSTRATION PROJECT – SOLAR PANELS**

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What is a CAO – RD&D???

- Issued primarily to Permitted Class D Recycling Centers of Universal Waste (but not all Class D facilities requested a CAO – RD&D). There is also at least one facility that has CAO-RD&D exclusively for EOL solar panels
- Allows facilities to accept non-hazardous, end-of-life solar panels in lieu of Federal regulations classifying these EOL solar panels as a Class D recyclable material and a Universal Waste
- CAO is good for one (1) calendar year and must be renewed annually unless Universal Waste rules are promulgated, and then the Department may immediately terminate the CAO.

Class D Facility Requirements:

Prior to accepting EOL solar panels, a facility with a CAO-RD&D **MUST:**

- Obtain identifying information for each solar panel
- Store in designated area
- Maintain logs for solar panels transferred including name, address and contact information of solar panel recycling facilities to which solar panels are transported
- Evaluate EOL solar panels for resale/reuse

Class D Facility Requirements:

If solar panel deemed not suitable for resale/reuse then facility with CAO-RD&D must:

- a) Provide designated end-markets with identifying information to classify each solar panel as hazardous or non-hazardous waste, based on end-market analytical database,
- b) Copy of analytical records to classify panels, to be maintained onsite
- c) All non-hazardous solar panels shall be shipped to designated end-markets within 90-days of being received.
- d) Solar panels classified as hazardous waste shall be returned to the source / generator.

Class D Facility Requirements:

- e) Processing (removal of components) is determined on case-by-case basis
- f) Facilities with CAO_RD&D are given a total volume of EOL solar panels allowed to be stored onsite – however, if exceeded, then they must immediately cease accepting solar panels until volume falls below threshold
- g) Facilities with CAO_RD&D must maintain daily log of all incoming EOL solar panels. **Must include:** Quantity; Generator contact information; Transporter information & copy of shipping papers; analytical results establishing non-hazardous status **OR** solar panel information that includes name of mfg of solar panels, model number or name of panel, type of solar panel (monocrystalline, polycrystalline, thin-film) and details of materials used in panel (SDS or product data sheets)

Why recycle EOL Solar Panels in NJ?¥

Newly introduced **New Jersey Senate Bill 3399**, mandates end-of-life recycling for solar and photovoltaic energy facilities and structures.

Allows Class D and other facilities that process end-of-life solar panels, to recover valuable materials such as glass, aluminum, silicon and other valuable metals. And by recycling these materials, the company will help to reduce waste, conserve resources, and promote a more circular economy.

This CAO – RD&D permit is the initial step ensuring that New Jersey will have the appropriate protocols in place to sustainably process end-of-life solar panels once Universal Waste solar panels regulations are promulgated by USEPA.