SAFT JACKSONVILLE
LITHIUM ION BATTERY FACILITY

INSIGNIFICANT EMISSIONS UNITS

OZONE EMISSIONS:

When the negative and positive mixes enter the coating lines, the aluminum substrate is corona treated. This is a radiation source and ozone is generated. Ozone is not a regulated pollutant and the emissions are small as shown below.

- Phase 1: 10.6 lbs/day x 365 days/yr = 3869 lbs/yr = 1.93 TPY
- Phase 2: No additional ozone generation
- Phase 3: 21.2 lbs/day x 365 days/yr = 7738 lbs/yr = 3.87 TPY (to be permitted at a later date and is not included in this permit)

Since the emissions are minor and ozone is not a regulated pollutant, this not considered to be an emissions unit and is listed here as an insignificant emissions unit.

This has been discussed with both Richard Robinson, P.E., Manager, Air Pollution Source Permitting Section, EQD, in Jacksonville and David Reed, Bureau of Air Regulation, DEP, in Tallahassee.

PARTICULATE MATTER:

Minor amounts of particulate matter (PM) is generated in several processes in the plant:

- Materials Handling
- Mixing
- Slitting
- Splicing
- Calender (sizing)
- Drying
- Winding
- Cell Assembly
- Welding Operations

These PM emissions are very minor and are directed into HEPA filters. The clean air is then returned to the plant. No PM is emitted to the atmosphere.

BACKUP GENERATOR:

The plant will also have an emergency backup generator for use as emergency power in the case of a power outage. The generator will operate 0.5 hours a month to maintain operational status. It will operate on diesel fuel. The specs are:

- Manufacturer make/model: Cummins Model 300DQDAC or approved equal,
- Size-output: 300kw, .8 power factor, 480/277 volt, 3 phase, 4 wire
- Energy source: No. 2 fuel oil

CARBON SCRUBBERS:

There are eight (8) carbon scrubbers:

- NMP storage tank - one in Phase 1 (a second will be added in Phase 3 and is not included in this permit)
- One for each filling line - one in Phase 1 and one in Phase 2 (a third will be added in Phase 3 and is not included in this permit)
- One for each feeding cabinet (3) (all 3 in Phase 1)
- The electrolyte cabinet (1) (in Phase 1)

The scrubbers themselves are 99.9% efficient. They scrub minor fugitive emissions that could occur from the above sources. The emissions are so minor that it is not possible to estimate the emissions. In a similar plant, these scrubbers have been operating for three years and have never had to be changed out.

POTENTIAL MINOR PARTICULATE MATTER IN CLEAN ROOM:

An exhaust ventilation system in the clean room channels outside air into an exhaust header, through the clean room and back outside. The exhaust header evacuates any nitrogen gas that may be released through the filter receivers as they come on line in the manufacturing process. The pre-filter is to prevent foreign particulates from entering the system. It is possible that some PM could be exhausted in this process but not likely. If it did happen, it would be very minor and not measurable.