Standards for Hurricane Evacuation and Disaster Event
Special Needs Shelter (SpNS) Selection

I. SpNS Design Criteria

Department of Health (DOH) guidance for design and selection of facilities to be used as a Special Needs Shelters (SpNS) in a hurricane/disaster event shall be consistent with the American Red Cross publication “Mass Care Standards and Indicators”. The SpNS facility must also meet all Florida Building Code (FBC) and American’s with Disabilities Act (ADA) accessibility requirements.

II. SpNS Occupancy Period

For planning purposes, it is assumed that the SpNS will be occupied at its maximum occupant capacity for, at a minimum, a continuous seventy-two (72) hour period during and post impact by a major hurricane (i.e., Category 3 or higher). It should also be assumed that the SpNS may be occupied for 12 hours in advance of arrival of hurricane force winds.

III. SpNS Structural Requirements

SpNS Structural Requirements shall at a minimum be consistent with the American Red Cross publication “Standards for Hurricane Evacuation Shelter Selection (ARC 4496). Preference shall be given to school facilities designed, constructed and inspected to comply with the public shelter design criteria, Enhanced Hurricane Protection Area (EHPA) requirements as set forth in section 423.25, Florida Building Code.

IV. Location and Site Requirements- Emergency Access

At a minimum, each SpNS should have at least two (2) major means of access for emergency vehicles. The additional need for access is due to the potential for medical emergencies associated with the fragile health conditions of the SpNS client population. The SpNS openings provide a means of emergency access and/or evacuation. These openings should be well supervised to monitor for safety and/or security threat to the SpNS occupants. All occupants of the building should be within a reasonable distance from these access/exit points, providing a choice in direction of escape in case of fire. All exits should be clearly marked and visible.

V. SpNS Capacity

Calculations to determine the capacity of a SpNS are identical to the EHPA calculations, except that the number of square feet required for each occupant is 60 square feet.
VI. Plumbing and Sanitation

**Potable Water.** Given the planning assumption that the SpNS will be open for a minimum of 72 hours during and post impact by a major hurricane, the SpNS should have a minimum of five (5) gallons of potable water per person per day for all uses (i.e., drinking water, hygiene, food preparation, etc.)

**Toilets, Sinks, Showers, Waste Water and Garbage Disposal.** Requirement criteria remain equal to ARC’s Mass Care Standards and Indicators and EHPA requirements, with the exception of the waste water reservoir capacity and garbage disposal plan shall be based on a 72-hour design occupant capacity.

**Electrical and Emergency Power Systems.** It should be assumed that utility power outages will occur and may continue for the duration of SpNS operation. Due to the fragile health and medical condition of the SpNS clients, it is imperative that the SpNS have back-up emergency electric power system.

The emergency electric power system shall be capable of supporting life safety, branch outlet and lighting circuits, air conditioning and other systems that are critical to the well-being of the clients, staff and care-givers. The absence of air conditioning can result in the deterioration of the SpNS client’s health status. Clients with chronic lung disease deteriorate at a rapid pace as the increase of temperature leads to increased breathing difficulty.

The power grid and back up emergency electric power capability must also be sufficient to power receptacles utilized to run oxygen concentrators, oxygen nebulizers and other medical equipment. (Note: Oxygen concentrators draw an average of 3.5-5.5 amps per unit. Nebulizers are used intermittently and have a negligible power draw.) Additional lighting (fixed or mobile) may be needed for providing client care (i.e., wound care, dressing change, etc.) and should be considered when determining power capacity.

Appropriately trained and equipped personnel should be present and on site at all times during the SpNS occupancy to operate, maintain and repair the generator(s). Sufficient supplies chosen by appropriately trained personnel must be available to route the power to where it is needed, (i.e., extension cords of adequate size, plug strips, tape to secure cords to the floor, etc.).

Sufficient fuel stores should be available for 72-96 hours of continuous generator use at full load.

Generators should be tested after each significant incident and on a monthly basis or as recommended by manufacturer if more frequent. Sites on facility grounds (i.e. lift stations) should have quick connects (as appropriate) to provide for utilization of back-up power generation equipment.
VII. Emergency Management Considerations

Posting SpNS floor plan. A copy of the floor plan must be posted for planning purposes.

Food Service. Food service planning should provide for the assumption of a minimum of 72 hours for SpNS occupancy. Additional consideration for clients with special dietary/metabolic health issues should be factored in food service planning. Vector risks should be minimized.

Supplemental Space Allocations. Additional space allocations should be considered for the following:

- Safe play areas for children.
- SpNS clients with ambulatory difficulties may need additional space for assistive devices (i.e., wheelchairs and walkers). These clients may also need to be provided space allocation on the ground floor or in areas free from level changes.
- SpNS clients who have dementia related diagnoses need additional space and safe area to roam and prevention from elopement.
- SpNS clients with service animals may need to be provided an area separate or away from the general SpNS client population.
- Quarantine areas for clients requiring isolation precautions. Respiratory isolation areas to be designated and assigned at each SpNS prior to occupancy by appropriately trained/experienced personnel.
- Appropriate space should be provided for the safe storage and movement of compressed gases (i.e., oxygen tanks, liquid oxygen) or other SpNS equipment and supplies.