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## Duxbury Nuclear Advisory Committee

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### TOWN OF DUXBURY RADIOLOGICAL EMERGENCY RESPONSE STANDARD OPERATING PROCEDURES [Rev. 18, 11/07] RECOMMENDED CHANGES

October 27, 2008

#### PROCESS

**The Plan and Procedures need to be made available by MEMA online and on CD.** This is practiced in some states, such as Vermont for Entergy's Vermont Yankee Nuclear Power Plant, and has been requested by DEMA. It would make it far easier to review; request changes [track change]; and distribute to each emergency responder and interested members of the public.

**Updating Procedures:** We have repeatedly been told by MEMA that the documents belong to Duxbury and can be updated at our request; however both Entergy and Mass. Emergency Management Agency (hereafter "MEMA") claim they can be updated only once a year.

**Participants in Negotiation Process:** Currently a representative from Duxbury Emergency Management Agency (hereafter "DEMA") meets with a representative from Entergy and from MEMA to negotiate changes. The negotiations may be more productive if Duxbury has more representatives sitting at the table, instead of being 2-1; of course with DEMA in the lead.

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### RECENT PERTINENT POLICY VOTES TOWN OF DUXBURY ANNUAL TOWN MEETING, BOARD OF SELECTMEN, SCHOOL COMMITTEE

#### Annual Town Meeting, some pertinent votes

##### 2004

ARTICLE 25... obtain and stockpile 3-M type masks in the schools in a quantity sufficient to provide for (a) each student and staff member, and (b) in the emergency shelters in a quantity sufficient to provide for the maximum capacity of each shelter; and to stockpile appropriate protective gear for Duxbury's emergency personnel who must be outside to perform their duties during a radiological emergency.

ARTICLE 26... obtain message boards for Duxbury Emergency Management use and other public safety purposes.

ARTICLE 38: The policy of the Town of Duxbury is to require that the Town shall sign the Duxbury Plan and Procedures for a Radiological Emergency at the Pilgrim Nuclear Power Station on the condition that the following is fully incorporated into the Plan and Procedures and in all interfacing plans and procedures: School Busses housed in Duxbury shall be for the exclusive use of Duxbury if a radiological emergency is declared at Pilgrim Station.

Article 39: The policy of the Town of Duxbury is to require that the Town shall sign the Duxbury Plan and Procedures for a Radiological Emergency at the Pilgrim Nuclear Power Station on the condition that the following is fully incorporated into the Plan and Procedures and in all interfacing plans and procedures: Duxbury's Reception Center and Mass Care Facility shall be equipped to deal with 100% of our institutionalized populations[1] and at least 75% of our non-institutionalized populations; not the current level of only 20%.

2006

**Article 40 – Evacuation Policy** – the Town voted to oppose the Nuclear Regulatory Commission’s and Licensee’s new emergency planning policy, as follows: The Town opposes the nuclear Regulatory Commission’s and Licensee’s new emergency planning policy that states, “The minimum recommendation that shall be made in a General Emergency is to evacuate 2 miles around and 5 miles downwind from the plant.” The Town of Duxbury recognizes that the impact from a nuclear disaster in a General Emergency is far greater than 2 miles around and 5 miles downwind and therefore planning should not be reduced from the current 10-mile Emergency Planning Zone, rather it should be expanded; further the concept of “downwind” is not appropriate in a coastal community where wind directions are variable. The Clerk of Duxbury shall forward the text of this article to the Town of Duxbury’s State and Federal delegations, the Select Boards within the Emergency Planning Zone of the Pilgrim Nuclear Power Station EPZ, the Nuclear Regulatory Commission and Entergy Corp., so that the intent of the citizens of Duxbury is widely known.

#### **Board of Selectmen Votes**

**2003:** Recommended, and Selectmen approved, requiring that the Annual Certification of Duxbury’s Emergency Plan in the Event of a Nuclear Disaster be a public process and occur at a Board of Selectmen’s meeting.

**2004:** REWMDS- BOS supported Carver site not acceptable – recommended changing location for Duxbury workers further away from Pilgrim, more easily accessible from Duxbury, and setting up more than one REWMDS for EPZ

#### **Duxbury School Committee**

**November 30, 1992** – unanimous vote to monitor school children first at Reception center

**October 22, 2001** School Committee Vote reaffirmed, "In the event of an emergency at Pilgrim Nuclear Power Station, which requires the evacuation of school children, all Duxbury students and staff will be monitored at the Reception Center before being relocated to the host school."

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### **OVERVIEW- MAJOR SUBSTANTIVE AREAS REQUIRING CHANGE**

In order to improve emergency response, the Town of Duxbury acquired a rapid telephone dialing [Connect-CTY], portable message boards [programmed by the Fire Dept and put in place by the DPW], filtration masks for our school children and emergency workers and initiated a gasoline protocol so that the DPD could open and operate the town’s independent gas stations in off business hours. These initiatives/protocols must be integrated into all appropriate sections of our Plan and Procedures, they are not at present. Other areas to update include, for example:

#### **1. Communication**

**Communication** is central to planning to let the public know about the emergency and appropriate protective action to take and to communicate to emergency responders. Key items here are missing, in addition to integrating Connect-CTY.

RACES (Regional Amateur Citizens Emergency System) – communication between Duxbury and the Transportation Staging Area in Marshfield for busses to transport school children campers, elderly at Bay Path and other transportation dependent is via RACES. Two problems: RACES equipment in Duxbury is not operable and Entergy has refused to fund new equipment; and second why depend on volunteer

system and a system suited as back-up means of communication for this important part of planning – we need both a primary and a back-up system. As it stands now, we depend on a back- up system that does not work operated by volunteers, not full time employees.

Flyers: The procedure says that if there is an emergency during the summer months that beach workers are to stand on Powder Point Bridge and hand-out flyers directing folks to either evacuate or shelter. Duxbury took the initiative to make two signs – one for sheltering and one for evacuation – both with instructions to turn on the EAS on the radio-listing the stations. The flyers should be dropped from the plan and procedures; it will slow traffic and risk exposing both workers and drivers [who should keep their windows up, not open for a flyer] to greater contamination.

Public Notification, earlier: At Alert the beach and other recreational areas are closed and boaters alerted. Because of technology [cell phones and other means of instant communication], the word will spread throughout the community rapidly. Without information and direction from recognized authorities, confusion, panic and uncontrolled public behavior is likely. Therefore to reduce panic and a disorderly public response we recommend either: A) informing the general public at this time by Connect-CTY and EAS or B) pre-positioning emergency responders at the Alert and waiting to inform the public as a whole at the Site Area.

Police Procedure: at Alert add to procedure to man key traffic control points in anticipation of self-evacuation of portions of public when beach/harbor/recreational areas closed at Alert.

## **2. Public/Worker Safety**

### **Monitoring at Reception Center**

ATM 2005, Article 39; School Committee votes: The policy of the Town of Duxbury is to require that the Town shall sign the Duxbury Plan and Procedures for a Radiological Emergency at the Pilgrim Nuclear Power Station on the condition that the following is fully incorporated into the Plan and Procedures and in all interfacing plans and procedures: Duxbury's Reception Center and Mass Care Facility shall be equipped to deal with 100% of our institutionalized populations[1] and at least 75% of our non-institutionalized populations; not the current level of only 20%. The rationale for this article was that if any member of the public is evacuated in a radiological disaster they should go to the Reception Center first for monitoring and decontamination, if required, irrespective of the designated level of the emergency. This is for both the public's health and peace of mind and for the safety of areas outside the spread of contamination. The SOPs incorrectly do not reflect this policy – schools, preschools, camps, those picked up at emergency bus routes, Bay Path and North Hill. The latter two groups, Bay Bath and North Hill, may require an alternative plan where monitoring is provided at their host facility if it is determined that it can be done and would be better for our citizens.

Procedures also should include a copy of the monitoring report be provided for each citizen immediately after monitored; and copy collected by teacher/Duxbury Staff if minor is not attended by parent/guardian -same procedure for special needs populations.

### **KI**

KI for Students: In the School Procedure (DUX-6 at 19] the school nurse at the Alert distributes KI kits to homerooms, at 4. Teachers will, if directed administer KI to students that have parental consent at the Alert [page 26 at 4]. The SOP fails to include Duxbury's policy that KI will be administered by the Site Area, as a precaution and in recognition that the licensee and state do not have the capability to determine with any degree of accuracy wind patterns and the transport path of contamination offsite – further they are relying on a faulty plume model and inadequate meteorological indicators. Additionally KI is a safe

over-the-counter substance – salt. Also KI is to be administered before students leave the building and board an evacuation bus – whether called “precautionary transfer” or not.

KI for all others, workers, campers, special needs, Bay Path etc: should follow school policy, above, and be integrated as such throughout the procedures, including making K on hand of campers, minors and special needs individuals.

KI for Preschools: Many Pre-schools have KI, not mentioned in procedures. Add to procedures with statement to the effect that if KI is part of school’s plan then.....follow updated Town of Duxbury school procedure, as described above.

KI to Reception Center: integrate into SOP to move any leftover KI to Reception Center and integrate into Braintree High School SOP.

**Filtration Masks:** Add to emergency workers dosimetry kits; add to instructions for school children to use as a precautionary measure when leaving building to board busses for “precautionary transfer” and for workers outside during site area/general emergency

**Name tags:** Add to procedure place name tags (name, town) for identification on small children, special needs, as appropriate

**REWMDS:** REWMDS is the worker monitoring and decontamination center. It is located in Carver, across the street from the 10 mile EPZ demarcation line, accessed by Route 44 and then Route 58. It is too close to the reactor and at risk to be contaminated itself; the route is a major evacuation route for parts of Plymouth and Carver and likely to be congested. Duxbury’s REWMDS should be located north and far enough away to be less likely to be contaminated. Hanover Mall is a potential recommendation.

### 3. Subarea Concept

The Town of Duxbury’s vote at ATM indicates that we do not support calling protective actions only for some subareas and not all communities in EPZ-if any area directed to take action, Duxbury shall also

### 4. Additional Evacuation Issues

**Mobilize Transportation Resources at Alert – busses, vans, tow trucks:** Rationale- (1) accidents can escalate rapidly; (2) notification of drivers/mobilization of busses from companies under contract will take time; (3) increased traffic due to word out of issues at PNPS because the beach/recreational areas will be notified/cleared . Therefore busses must be sent as a precaution [pre-staged] to schools, nursing facilities, group homes at Alert, not wait until Site Area/General Emergency. If the accident de-escalates a real time drill has been accomplished.

**Buses Housed at Chandler School:** Include in Plan that they are for the exclusive use Duxbury, if a radiological emergency is declared at Pilgrim.

**Summer- Mattakeeset Court/Harbor Area:** Change procedure so that trailers and boats are left in parking lot so as not to slow traffic and risk blocking narrow egress.

**Bus Pick Up:** clarify Emergency Bus Route and Pick-Up Points in Duxbury; eliminate west-end Powder Point pick-up stop off season.

## **5. Additional Sheltering Issues**

Provide sheltering advice in all procedures, interior rooms away from window and at greatest distance from roof; if possible; if must shelter in room with windows, keep shelterees below height window. List public shelters in procedure; prepare map of preferred shelter location within public shelters and signs directing public to those locations; note that Alden School Gym is a public shelter while school in session and shelter manager is to cordon off public from school by locking grate located on the corridor between the Art and Technology Lab and the grate after the bathroom by the Supply Room.

## **6. Missing From Procedures**

**Day cares < 6 students:** Omitted procedures for Day Care Facilities with less than 6 children [formerly Dux 30h]; omitted conservation workers on Duxbury Beach.

**North Hill Day Programs:** Some/all [maximum of 8] of the residents have day programs in Plymouth, Kingston, Braintree and Middleboro. Clients in EPZ day facilities fall under that town's plan; clients in Middleboro or any other town outside the EPZ need to be treated similar to students attending school outside the EPZ. Those day facilities need to be contacted at Alert and plan established - incorporate in procedure.

**DPW: Add areas To Clear Snow/Debris:** Include: all Town Shelters; school parking areas for parent pick-up and access roads to schools; access to group facilities and nursing homes – provide list areas to clear in SOP

**A review of each procedures follows:** Main issues are listed first followed by a page-by-page review.