MAINE STATE LEGISLATURE

The following document is provided by the
LAW AND LEGISLATIVE DIGITAL LIBRARY
at the Maine State Law and Legislative Reference Library
http://legislature.maine.gov/lawlib

Reproduced from electronic originals
(may include minor formatting differences from printed original)

Maine Center for Disease Control and Prevention
An Office of the Department of Health and Human Services
John E. Baldacci, Governor Brenda M. Harvey, Commissioner

Department of Health and Human Services
Maine Center for Disease Control and Prevention
286 Water Street
11 State House Station
Augusta, Maine 04333-0011
Tel: (207) 287-8016
Fax: (207) 287-9058; TTY: 1-800-606-0215

March 13, 2009

To: Honorable Ms. Elisabeth Mitchell, President of the Senate
Honorable Ms. Hannah Pingree, Speaker of the House

Subject: State Nuclear Safety Inspector Office's February 2009 Monthly Report to the Maine Legislature

New legislation was enacted in the second regular session of the 123rd and signed by Governor John Baldacci last spring requiring that the State Nuclear Safety Inspector prepare a monthly report on the oversight activities performed at the Maine Yankee Independent Spent Fuel Storage Installation facility located in Wiscasset, Maine.

Enclosed please find the Inspector's February 2009 monthly activities report. Should you have questions about its content, please feel free to contact me at 207-287-6721, or e-mail me at pat.dostie@maine.gov.

Patrick J. Dostie
State Nuclear Safety Inspector

Enclosure
cc:
Mr. E. William Brach, U.S. Nuclear Regulatory Commission
Ms. Nancy McNamara, U.S. Nuclear Regulatory Commission, Region I
Mr. James Connell, Site Vice President, Maine Yankee
Ms. Brenda Harvey, Commissioner, Department of Health and Human Services
Mr. Geoff Green, Deputy Commissioner, Department of Health and Human Services
Ms. Lucky Hollander, Director of Legislative Relations, Department of Health and Human Services
Dr. Dora Mills, Director, Maine Center for Disease Control and Prevention
Mr. Patrick Ende, Senior Policy Advisor, Governor's Office
Mr. David Littell, Commissioner, Department of Environmental Protection
Mr. Richard Davies, Maine Public Advocate
Lt. William Snedeker, Special Services Unit, Maine State Police
Ms. Nancy Beardsley, Director, Division of Environmental Health
Mr. Jay Hyland, PE, Manager, Radiation Control Program

State Nuclear Safety Inspector Office

February 2009 Monthly Report to the Legislature

Introduction

As part of the Department of Health and Human Services' responsibility under Title 22, Maine Revised Statutes Annotated (MRSA) §666 (2), as enacted under Public Law, Chapter 539 in the second regular session of the 123rd Legislature, the foregoing is the eighth monthly report from the State Nuclear Safety Inspector under this new legislation.

The State Inspector's individual activities for the past month are highlighted under certain broad categories, as illustrated below. Since some activities are periodic and on-going, there may be some months when very little will be reported under that category. It is recommended for reviewers to examine previous reports to ensure connectivity with the information presented as it would be cumbersome to continuously repeat prior information in every report.

Since the footnotes are expanded definitions of some scientific terms, for simplicity they were placed in a glossary at the end of the report. In addition, to better understand some of the content of the topics, some effort was placed in providing some historical information. However, for the time being this historical context will be provided as an addendum to the report.

Independent Spent Fuel Storage Installation (ISFSI)

During February the general status of the ISFSI was normal, except for the snowstorm on February 22nd. In anticipation of the snowstorm additional measures were put in place and were terminated once the storm passed. There were two instances of spurious alarms due to environmental conditions. Both alarms were investigated and no further actions were warranted. There were no fire or security related impairments.

Three security events were logged in February. Two were related to environmental conditions, such as the February 22nd snowstorm. As part of its operational constraints after a snow event the vent screens for the concrete casks need to be inspected daily for blockage. The venting is necessary to ensure that the cooling of the cask internals is maintained. The third addressed testing of security alarms.

There were ten condition reports[1] (CRs) for the month of February. The first one occurred on February 8th and had to do with a water issue. The truck bay sump backed up due to ground water inflow. A second CR was written on February 10th for an environmental thermoluminescent dosimeter (TLD[2]) which became dislodged from its holder and fell to the ground. A third CR was initiated on February 17th on a small diesel fuel oil spill resulting from an overfilling of the snow plow truck. The spill was reported to the Department of Environmental Protection (DEP) and was fully remediated and verified as clean by Maine Yankee's environmental consultant. A fourth CR was generated on February 17th for another TLD becoming dislodged from its holder and dropping to the ground. A fifth CR was written on the same day for the repetitive loss of contact alarms with one of the fence line radiation monitors. The unit returned to normal status later that day. A sixth CR was written on February 20th on the small enclosure to one of the ambient air temperature sensors. The grating around the sensor was damaged, but the sensor was not affected and

[1] Refer to the Glossary on page 6.
[2] Refer to the Glossary on page 7.

functioned properly. A seventh CR was written on February 23rd over the ISFSI logs. The temperature readings for two casks on the same pad were transcribed in reverse on the log form. An eighth CR was written on February 24th on the contact between equipment and the inner security fence. During snow removal, a bucket loader bumped a fence post resulting in some minor damage to the post. A ninth CR was written on February 28th on the Security Log Event 09-013 over the incomplete testing of the security alarms. When the issue was identified all the alarms were satisfactorily retested. A tenth CR was written the same day for the Security Event Log 09-014 over an error in keeping track of multiple tests being performed simultaneously.

On February 2nd Maine Yankee submitted to the U.S. Nuclear Regulatory Commission (NRC) thirteen changes to its ISFSI Emergency Plan as part of its annual review of the Plan. The majority of the changes were editorial in nature with some programmatic changes.

On February 3rd Maine Yankee submitted to the NRC modifications to its ISFSI Security Plan. Since the submittal is Safeguards Information, the information is classified and, therefore, not available for public disclosure.

On February 10th the State Inspector's Annual Accounting Report on the Interim Spent Fuel Storage Facility Oversight Fund was submitted to the Co-Chairs of the Joint Standing Committee on Utilities and Energy.

On February 18th the Manager of the State's Radiation Control Program submitted the Department of Health and Human Services' 2008 Report of Oversight Activities and Funding to the Joint Standing Committee on Utilities and Energy. The oversight activities were conducted under the Interim Spent Fuel Storage Facility Fund. The Oversight Group is comprised of representatives from the Department of Environmental Protection, the Department of Health and Human Services, the Office of the Public Advocate, the Department of Public Safety, Maine Yankee, and an Independent Expert in Radiological and Nuclear Engineering. The latter is expected to be retained by this summer.

On February 27th Maine Yankee submitted as part of its ISFSI Security Plan, its Memorandum of Understanding with three local law enforcement agencies (State Police, Lincol , and Wiscasset Police Department). Since the MOU's contain Safeguards Info t be disclosed to the public.

Also on the 27th, Maine Yankee submitted Revision 5 to their License Termin chapters in the LTP two had revisions. Chapter 1 had changes related to provided a listing of the revision history for all the chapters and Attachment revisions were made according to 10 CFR 50.59 process. The NRC 50.59 pro certain changes to their license without prior NRC approval provided the changes do not result in an un-reviewed safety question, a reduction in safety margin or an increase in the frequency of a previously evaluated accident. The revisions under Chapter 4 deleted Attachment 4C on "Remediation Survey – Gamma Scan" and their associated references.

Environmental

In addition to the on-going air sampling at the old Bailey Farm House, the State Inspector received results on the State's environmental surveillance program for final quarter of 2008 from the State's Health and Environmental Testing Laboratory (HETL). The results are presented in Table 1 on page 3.

The HETL employs various analytical methods to measure particular radioactive elements that are described in the Glossary. All the positive results reported highlight naturally occurring background levels and ranges. There are some seasonal variations, but these would be difficult to point out with only one data point. The

State's 2008 environmental surveillance results will be graphed to illustrate potential trends in the Inspector's annual report due July 1st.

Table 1

Media Type	Positive Results	Quarterly Sampling Period (Oct-Dec '08)
Freshwater	Gross Beta[3]	1.40 pCi/L[4]
	Tritium (Hydrogen-3 or H-3)[5]	180 pCi/L
Seawater	Tritium (H-3)	BIDC*
	Potassium-40 (K-40)	163 pCi/kg[5]
Seaweed	Beryllium-7 (Be-7)	89.4 pCi/kg
	Potassium-40 (K-40)	4,020 pCi/kg
Air Filters	Gross Beta (range)	13.8 – 32.0 fCi/m^3 (6)
	Quarterly Composite (Be-7)	58.9 fCi/m^3

* BIDC = Below Instrument's Detection Capability

Tritium (Hydrogen-3 or H-3) and Beryllium-7 (Be-7) are both naturally occurring "cosmogenic" radioactive elements, which mean they are continuously being produced by cosmic-ray interactions in the atmosphere. Be-7 is produced from the high-energy cosmic rays bombarding the oxygen, carbon and nitrogen molecules in the atmosphere. Besides being cosmogenically produced, Tritium is also a man-made element as it is a by product of the fission and neutron activation processes in nuclear power plants. Potassium-40 is a naturally occurring "primordial" radioactive element, which means that it was present like Uranium when the earth was formed.

Maine Yankee Decommissioning

With only the East Access Road survey near the ISFSI scheduled for further evaluation this spring, two of the final three confirmatory reports were reviewed and comments were forwarded to the State's consultant. Both reports were revised. At present, there are ten confirmatory reports that are essentially complete with one remaining that is currently being drafted. Additional documentation was compiled and forwarded to the State's consultant for incorporation of that information into the final draft. However, due to the numerous areas surveyed during the final site walk down survey, more information is still being compiled for this last confirmatory report.

In February an amendment to the consultant's initial $10,000 contract was submitted to increase the amount to $15,000. The reason for the extra $5,000 was that the original allocation did not envision all the major revisions that had to be made to the confirmatory reports and the additional complexity of the final site walk down report containing 14 distinct survey areas on the 150 acre Maine Yankee site.

Groundwater Monitoring Program

The review of Maine Yankee' third annual report without the Appendices commenced on February 26th and was expected to last for a week. However, since the Appendices are housed in six three inch binders, it is expected that review will take at least a month.

Footnotes 3-6: Refer to Glossary on pages 6 and 7.

On February 27th, as part of the State's quality assurance oversight under the Post Decommissioning Agreement for Groundwater Radiation Monitoring between Maine Yankee and the Department of Environmental Protection, the State Inspector provided Maine Yankee with a list of seven groundwater wells that needed to be sampled in March and analyzed by the State.

Other Newsworthy Items

1. On February 6th the Congressional Research Service published a report, entitled "Nuclear Waste Disposal: An Alternative to Yucca Mountain". The report outlined consequences of a Yucca Mountain policy shift that included federal liabilities for disposal delays, licensing complications for new power reactors, environmental cleanup penalties, and long term risks. The report also probed into nuclear waste policy options, such as institutional changes, extended on-site storage, federal central interim storage, private central storage, spent fuel reprocessing and recycling, non-repository options, and a new repository site. The purpose of the Congressional Research Service is to provide Congress with analysis and research services that are authoritative, objective, nonpartisan, and confidential.

2. On February 6th the Decommissioning Plant Coalition (DPC) commented on the Nuclear Regulatory Commission's (NRC) waste confidence rule. The NRC's rule states that the Commission is confident that spent fuel waste could be effectively managed and safely stored at power reactor sites for up to 60 years beyond the design life of a nuclear power plant when disposal is expected to be available. The DPC is a consortium of stakeholders from Maine, Wisconsin, Massachusetts, Connecticut, California, and Michigan, which seek the removal of spent fuel from shut-down reactors to a more centralized interim storage facility. The DPC was instrumental last month in having Senators Snowe and Collins, Senators Kohl and Feingold from Wisconsin and Senator Feinstein from California signing and forwarding a letter to then President-Elect Obama, urging him and his new Administration to give priority to the removal of spent nuclear fuel from their decommissioned reactor sites as part of the Administration's consideration of alternatives for the storage of spent fuel.

3. On February 16th the Nuclear Energy Institute (NEI), the governmental affairs arm of the nuclear industry, called on President Obama to convene a blue ribbon nuclear waste commission to formulate alternatives to burying high-level nuclear waste at Yucca Mountain.

4. On February 17th the NRC approved a final rule that incorporates s the Environmental Protection Agency's (EPA) radiation protection standards for the proposed high-level waste repository at Yucca Mountain in Nevada. The final rule retains EPA's dose limits of 15 millirems[7] for the first 10,000 years and 100 millirems thereafter up to one million years.

5. On February 18th Energy Secretary Steven Chu told the National Association of Regulatory Utility Commissioners from 39 states, where nuclear waste is stored, that he favors the Yucca repository licensing process before the NRC to continue. However. Dr. Chu stressed President Obama's opposition to the Yucca repository and that his comment expressed more of a desire to learn from the license review.

6. On February 24th Senator Majority Leader Harry Reid from Nevada announced that he was successful in cutting an additional $100 million from the Yucca Mountain Project reducing the initial request made by the previous administration from $494.7 million down to a final $288.4 million. The omnibus bill, when signed by President Obama, would finalize spending through September 2009 for

Footnote 7: Refer to the Glossary on page 7

a number of federal agencies after lawmakers failed to finish that work last year. A stopgap bill expires on March 31st.

7. On February 25th the State Inspector participated in the periodic status briefings of the Nuclear Waste Strategy Coalition (NWSC). The major topic on the agenda was the $106 million cut from the Department of Energy's (DOE) budget on the Yucca Mountain Project in Nevada. The NWSC is an ad hoc group of state utility regulators, state attorneys general, electric utilities and associate members representing 47 stakeholders in 31 states, committed to reforming and adequately funding the U.S. civilian high-level nuclear waste transportation, storage, and disposal program.

8. On February 26th President Obama revealed his proposed federal budget for FY 2010 that reflected his apparent opposition to the Yucca Mountain Project. The language in the proposed budget stated that the "the Yucca Mountain program will be scaled back to those costs necessary to answer inquiries from the Nuclear Regulatory Commission", (on DOE's Yucca Mountain license application pending before the NRC), "while the administration devises a new strategy toward nuclear waste disposal".

Glossary

Condition Report (CR): A report that promptly alerts management to potential conditions that may be adverse to quality or safety. The report is generally initiated by a worker at the ISFSI facility. The report prompts management to activate a process to identify causal factors and document corrective and preventative measures stemming from the initial report.

Decay Series: There are three naturally occurring decay series of heavy elements that transform into a series of various radioactive elements by releasing energy in the form of particles, (such as alpha or beta), and/or gamma rays to end in a stable form of non-radioactive Lead. All three decay series start with extremely long lived radioactive, heavy elements that can be measured in geologic time units. They are Uranium-238 with an approximate half-life of 4.5 billion years, Uranium -235 with a half-life of about 700 million years, and Thorium-232 with a half-life of 14 billion years. All three series contain some more well-known radioactive species, Radium and Radon.

Dose is the amount of radiation that is absorbed by a person's body. In the radiation field the term dose is sometimes used interchangeably with dose equivalent, which is defined as the rem and described below.

fCi/m^3 is an acronym for a femto-curie per cubic meter, which is a concentration unit that defines how much radioactivity is present in a particular air volume, such as a cubic meter. A curie, named after its discoverers Pierre and Marie Curie, is defined as the rate at which a radioactive element transforms itself into another element that is most often another radioactive element. It is mathematically equivalent to 37 billion disintegrations or transformations per second. A "femto" is a scientific prefix for an exponential term that is equivalent to one quadrillionth (1/1,000,000,000,000,000).

Gamma Spectroscopy is a scientific method used to analyze gamma rays emanating from radioactive elements. The analytical system determines the gamma ray energy which acts as a "fingerprint" for specific radioactive materials. For example, Potassium-40 (K-40) has a very, distinctive gamma energy at 1460 keV. This uniqueness allows the instrument to positively identify the K-40 1460 energy as its own unique fingerprint. A keV is an abbreviation for kilo electron volt, which is a measure of energy at the atomic level. A kilo is a scientific prefix for the multiplier 1,000.

Gross Beta is a simple screening technique employed to measure the total number of beta particles emanating from a potentially radioactive sample, with higher values usually indicating that the sample contains natural and/or man-made radioactive elements. High values would prompt further analyses to identify the radioactive species. A beta is a negatively charged particle that is emitted from the nucleus of an atom with a mass equal to that of an orbiting electron.

Liquid Scintillation is an analytical technique by which Tritium and many other radioactive contaminants in water are measured. A sample is placed in a special glass vial that already contains a special scintillation cocktail. The vial is sealed and the container vigorously shaken to create a homogeneous mix. When the tritium transforms or decays it emits a very low energy beta particle. The beta interacts with the scintillating medium and produces a light pulse that is counted by the instrument. Although a different scintillation cocktail is used, this is basically how radon in well water is measured.

pCi/kg is an acronym for a pico-curie per kilogram, which is a concentration unit that defines how much radioactivity is present in a unit mass, such as a kilogram. A "pico" is a scientific prefix for an exponential term that is equivalent to one trillionth (1/1,000,000,000,000).

pCi/L is an acronym for a pico-curie per liter, which is a concentration unit that defines how much radioactivity is present in a unit volume, such as a liter.

Rem is an acronym for roentgen equivalent man. It is a conventional unit of dose equivalent that is based on how much of the radiation energy is absorbed by the body multiplied by a quality factor, which is a measure of the relative hazard of energy transfer by different particles, (alpha, beta, neutrons, protons, etc.), gamma rays or x-rays. In comparison the average natural background radiation dose equivalent to the United States population is estimated to be 292 millirems per year, or 0.8 millirem per day, with 68 % of that dose coming from radon. A millirem is one thousandth, (1/1000), of a rem.

Roentgen is a special unit of exposure named after the discoverer of X-Rays, Wilhelm Roentgen. It is a measure of how much ionization is produced in the air when it is bombarded with X-Rays or Gamma Rays. Ionization is described as the removal of an orbital electron from an atom. A milliRoentgen is one thousandth (1/1000) of a Roentgen.

Thermoluminescent Dosimeters (TLD) are very small plastic-like phosphors or crystals that are placed in a small plastic cage and mounted on trees, posts, etc. to absorb any radiation that impinges on the material. Special readers are then used to heat the plastic to release the energy that was stored when the radiation was absorbed by the plastic. The energy released is in the form of invisible light and that light is counted by the TLD reader. The intensity of the light emitted from the crystals is directly proportional to the amount of radiation that the TLD phosphor was exposed to.

Tritium (Hydrogen-3 or H-3) is a special name given to the radioactive form of Hydrogen usually found in nature. All radioactive elements are represented as a combination of their chemical symbol and their mass number. Therefore, Tritium, which is a heavy form of the Hydrogen molecule with one proton and two neutrons in the nucleus of its atom, is abbreviated and represented by its chemical symbol, H, for Hydrogen and 3 for the number of particles in its nucleus, or mass number. Similarly, other radioactive elements, such as Potassium-40, can be represented and abbreviated as K-40, and so on.

Addendum

Historical Perspective

Independent Spent Fuel Storage Installation (ISFSI)

In 1998 the Department of Energy (DOE) was supposed to take title and possession of the nation's spent nuclear fuel as mandated by the Nuclear Waste Policy Act (NWPA) of 1982. When the NWPA was enacted, Congress assumed that a national repository would be available for the disposal of the spent fuel. Since the licensing and construction of the high level waste repository at Yucca Mountain in Nevada has experienced significant delays, DOE is currently projecting that the Yucca Mountain site will not be available until at least the year 2020 or later.

DOE's inaction prompted Maine Yankee to construct an ISFSI during decommissioning to store the more than 1400 spent fuel assemblies that were previously housed in the spent fuel pool in the plant, into 60 storage casks on-site. Another four casks contain some of the more radioactive components of the reactor internals that were cut up during decommissioning, since their radioactive concentrations were too high to dispose at a low level radioactive waste facility. These are expected to be shipped along with the spent fuel to the Yucca site should the repository open.

Environmental

Since 1970 the State has maintained an independent, radiological environmental monitoring program of the environs around Maine Yankee. Over the years there was an extensive quarterly sampling and analysis program that included such media as salt and fresh water, milk, crabs, lobsters, fish, fruits, vegetables, and air. Since the decommissioning the State's program has been reduced twice to accommodate decreased revenues for sample analyses at the State's Health and Environmental Testing Laboratory (HETL). Presently, the State monitors one freshwater location, one saltwater and seaweed location, and one air sample location. The State maintains a quarterly sampling regimen, except for the air sample, which is performed bi-weekly near the old Bailey Farm House. Besides the media sampling, over the years the State has maintained a robust thermoluminescent dosimeter (TLD) program to measure the radiation environment. The TLDs were placed within a 10 to 20 mile radius of the plant to measure the background radiation levels and later, when the plant was operating, any potential increases in background levels due to plant operations. Over time the number of TLDs nearly doubled to address public concerns over the clam flats in Bailey Cove and the construction of the ISFSI. After the plant's decommissioning the State reduced the number of TLDs around Bailey Cove, but maintained the same number for the environmental surveillance of the ISFSI. A further evaluation of reducing the State's radiological environmental monitoring program is planned for the fall of 2009.

Maine Yankee Decommissioning

Maine Yankee's decommissioning was completed in the fall of 2005. At that time the State Nuclear Safety Inspector (SNSI) also commenced his final walk down survey of the site. Certain areas such as the transportation routes exiting the plant site were surveyed after the plant industrial area was decommissioned. Due to the length of the egress routes, it took a considerable amount of time to complete both half-mile east and west access routes and the two thirds of a mile of the railroad track. In addition, seven specific areas,

including the dirt road, were also examined as part of the final site survey. The State's final survey of the dirt road leading to the old softball field was extended in the fall of 2007 when the State discovered three localized elevated areas on the road that were contaminated. At that time, extensive bounding samples were taken to determine the extent of the contamination.

Because of the State's findings the original Class III designation of little or no potential for small areas of elevated activity was deemed incorrect. Therefore, the Dirt Road systematic sampling was necessary to ensure that all the State's findings would still pass Maine Yankee's License Termination Plan (LTP) Class I criteria. In September's report the results of Maine Yankee's 18 Dirt Road soil samples identified one sample with man-made Cesium-137, with the remaining radioactivity from natural radioactive elements normally found in soil and bedrock, namely Uranium and Thorium and their respective decay series, and Potassium-40. On October 16th the State met with Maine Yankee to discuss their findings. The State's analyses reported that six of their 18 soil samples contained the radioactive element Cesium-137 with the remainder from the same natural decay series and Potassium-40 that was found in the Maine Yankee samples. In both cases the findings indicated that the concentration of the Cesium-137 was low and comparable to what is normally found in nature from past weapons testing during the 1950's and 1960's. On October 31st the State issued a letter to Maine Yankee stating that, based on the recent systematic sampling and bounding efforts on the elevated areas, the results demonstrated that Maine Yankee had met its Class I LTP criteria. Therefore, the State concluded that there were no further outstanding issues relative to the Dirt Road and considered the issue closed. Even though some residual radioactivity remains, due to the localized nature of the contaminant and the restricted security access to the site, the contamination found does not present a public health hazard.

With the closure of the Dirt Road, the only remaining walk down survey left to be performed on-site is the portion of the East Access Road adjacent to the ISFSI bermed area. This area remains as the background radiation levels from the ISFSI were initially too high to survey, (greater than 30,000 counts per minute), and could mask potential elevated areas. Since then the State has been monitoring the levels every spring and has observed a steady decrease in the ambient radiation levels down to 25,000 counts per minute (cpm). When the levels reach about 20,000 cpm the area will be surveyed to close out all transportation routes at the Maine Yankee site.

The State will publish its decommissioning findings in a confirmatory summary that is expected in March of 2009. As part of that process the State will condense over 40 major survey areas into eleven confirmatory reports that are being worked on by an outside consultant. The independent consultant has been collecting all the State's findings and summarizing them in confirmatory reports that the State Nuclear Safety Inspector will use to complete the State's confirmatory summary.

Groundwater Monitoring Program

In June of 2004, the State, through the Department of Environmental Protection's (DEP) authority under 38 MRSA §1455, signed an agreement with Maine Yankee for a five year, post decommissioning radiological groundwater monitoring program at the site. Presently, the program is starting its fourth year. The details of how the agreement would be carried out relative to the quality assurance facets of the monitoring, sampling and analyses would be captured in Maine Yankee's Radiological Groundwater Monitoring Work Plan.

The normal sampling regimen for the groundwater monitoring program is March, June and September of each year. However, since the first sampling took place in September of 2005, the annual sampling constitutes the September sampling of the current calendar year and finishes with the June sampling of the following year.

It should be noted that the Agreement between the State and Maine Yankee set an administrative limit of 2 mrems per year per well as a demonstration that it has met the State's groundwater decommissioning standards of a 4 mrem dose per year above background values. If a well exceeds the 2 mrem value after the five year monitoring program ends, Maine Yankee would allow the State to continue monitoring that well. To-date fifteen of the sixteen wells sampled have not exceeded one tenth of the limit, or 0.2 mrems/yr. Only well number MW-502 has come close to exceeding the 2 mrems administrative limit and that was back in March of 2006 when the dose was 1.96 mrems. Since then the Tritium in this well has been steadily decreasing. It is expected that this well will remain elevated for some time as the water infiltration rates are very low. Consequently, the decrease will be slow and steady.