

Local

DUMPS: A group of mothers protests the proposed North Codorus waste dump while federal, state and county agencies gear up. Page 3A.

PARKING: A local magistrate had a few parking problems at his office, and now he must have a hearing before another magistrate. Page 3A.

TMI leaks revive cleanup debate

By PATRICE FLINCHBAUGH

Of the Daily Record

Newly-publicized radiation leaks at Three Mile Island have rekindled debate about the speed and method of cleaning up the idle nuclear reactor.

Medium-levels of radioactive tritium, cesium and strontium were discovered two weeks ago in damp, cork-filled gaps between walls at Unit 2, TMI officials an-

nounced for the first time. Thursday at a public briefing.

(The announcement was made just as 14 TMI workers completed the fifth manned entry into Unit 2, venturing closer to the damaged reactor core than ever before.)

Tritium also has been discovered in a drainage system under a concrete and steel storage vault, and in groundwater near a water storage tank, said Robert C. Ar-

nold, TMI senior vice president.

Slight levels of cesium also were found in the drainage system, another TMI spokesman said.

There is a slight chance radiation in the cork joints came from Unit 2's containment building, said Arnold.

He also said the radiation could have been washed into the expansion joints during initial decontamination efforts after the March 28, 1979 accident.

Karl Abraham, U.S. Nuclear Regulatory Commission spokesman, said leaky pipes have not been ruled out either.

Radiation from any of the three trouble spots has not gone offsite, Arnold said.

Nuclear power foes insist Metropolitan Edison Co.'s current radiation woe is a device — "a test balloon" — to get public support for the utility's proposed

multimillion-dollar accident water cleaner. Met-Ed, a subsidiary of General Public Utilities, owns TMI.

The cleaner, called the submerg-ed demineralization system (SDS), will be reviewed by the U.S. Nuclear Regulatory Commission next year.

Anti-nuclear groups have said

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SDS yields waste too radioactive for safe burial.

Radioactive wastes from SDS' cousin, EPICOR II, are being stored temporarily on the island in a steel and concrete silo. EPICOR II cleansed medium levels of radioactive water from the accident.

The drainage system under EPICOR II's storage vault was the second source of radioactive pollution Arnold mentioned Thursday.

Tritium levels there are considerably higher than normal readings found in nature, said

Doug Bedell, a TMI spokesman. Bedell said gas inside the vault may be pushing its way through seams in drums which contain used EPICOR II filters and liners.

Or the drums themselves could be corroding, he said. A third possibility is that heavy rains leached through the vault, drawing radiation outside, said Bedell.

The third trouble spot Arnold mentioned is underneath a tank which holds borated water used to stop the nuclear fission reaction during emergencies.

Water samples taken from test wells near the tank showed high levels of tritium in the groundwater. Tritium was first detected last spring, said Tom Gerusky, director of radiation protection, state Department of Environmental Resources. The highest readings so far were in September.

Gerusky said the tritium would eventually reach the Susquehanna River, although not until the end of 1981, assuming groundwater flow rates have been calculated accurately.

He said the tritium levels measured fall below federal safe drinking water standards.

Radiation protection officials cannot pinpoint the source of that tritium with certainty.

Some blame a leaking borated water tank. But direct leaching from the reactor building through the cork joints has not been ruled out.

Those joints extend 10 feet underground and are believed to rest directly on bedrock.

"(The radiation) is not that serious or Met-Ed would have been required to tell us immediately," said Steven Sholly, of TMI Legal Fund, an anti-nuclear coalition. "I doubt very much the containment building is leaking."

But Met-Ed spokesmen said elements of an emergency still exist at the Middletown plant. Cleanup must be expedited to prevent future problems, they said.

The reactor containment building was not designed to hold anything for years, said Gerusky.

He added, "The question is whether this radiation is new or has been around since the accident and is just being discovered now."

"It could be a Band-Aid effort until that (accident) water is out of there," he said.



A TMI cooling tower is quiet now.

TMI

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el also will be smoother, he said.

The goal, according to plant spokesman Doug Bedell, is to outfit the control room with a more understandable, predictable control panel that leaves less room for guesswork in times of an emergency.

For instance, during the 1979 accident at Unit 2, cardboard tags on the panel created some confusion which federal investigators later said aggravated accident conditions. Apparently, the tags — hanging off control knobs of systems under maintenance — covered a key indicator light which led operators to believe an emergency water valve was closed when in fact it was open. That open valve was responsible for much of the accident water TMI officials now have to decontaminate.

A newly installed flow meter will indicate whether that "pilot operated relief valve" is open or closed in the future, according to Zewe. Bedell said the company considers the new meter its most important modification since the accident.

The culprit cardboard tags are now stapled securely around control knobs, instead of dangling freely from them, said Zewe.

Zewe said another technical change has occurred on the control panel. Lights which merely indicate a mechanical function has happened — and not necessarily prove that it has — have been permanently labeled for the operators' benefit.

Bedell said other planned hard-

ware changes, invisible to the layman, will provide more automatic control over the reactor vessel during emergencies, but not as much as some anti-nuclear groups are requesting.

The NRC also required a graduate engineer be added to control room staffs of all commercial nuclear plants to serve as a trouble-shooter — "someone not directly connected to the plant's operation who could sit back and see the big picture," as Zewe described the individual.

Bedell said TMI's training program has changed somewhat. Six-man control room crews are scheduled such that crews spend every sixth week in a training classroom, he said.

A mock control panel also has been installed for training purposes in the south end of the idle Unit 1 turbine room. An artist's rendering of a soon-to-be-added computer screen is included.

The new computer will translate information from numerous graphs on the control panel into a streamlined, multi-colored computer chart. Operators will be able to tell from the single screen whether reactor pressures and temperatures are at the proper level, said Ralph Neidig, a TMI spokesman.

Bedell said reactor operators are initially trained on a simulator at Babcock & Wilcox, in Lynchburg, Va. Babcock & Wilcox manufactured the TMI reactors.