

**Michael Labriola**

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**From:** Jjtawil@aol.com  
**Sent:** Wednesday, May 02, 2012 8:22 AM  
**To:** labriola@i-s-r.ca  
**Subject:** Re: The DECON code from PNL

Mr. Labriola,

Thank you for your e-mail. The DECON program was developed at Battelle Pacific Northwest Laboratory (PNL) in the early '80s under a contract with the NRC. I was the source of the concept and also wrote the code for it. When I left Battelle in 1989 to form my own company, I tried to further develop the business area, but met with limited success. I think the primary difficulty was that my last project for the NRC was to characterize the off-site consequences of reactor accidents, ranging from SST-1 through SST-5, for three reactor sites, one of which was Indian Point (to obtain an upper limit on the consequences). I think the NRC was a little shocked at the magnitude of the off-site consequences of an SST-5 at Indian Point and decided not to publish the report. Of course, the Chernobyl accident in 1986 demonstrated that consequences could be substantial. As you know, Indian Point is located about 25 miles from New York City, so off-site consequences at Indian Point would be much greater than in the Bryansk region in Russia.

While at Battelle, I also developed a similar capability for the Defense Nuclear Agency, which is concerned with broken arrow accidents. I applied the basic DECON program, but with the nuclear products that would be present in a broken arrow accident. For this application, DECON became the Site Restoration Program. After leaving Battelle, I continued to develop the capability for the DNA. I also participated in two or three field exercises and provided some training programs so that their personnel would be able to use the program in the event of a real broken arrow accident.

So there you have the short history of the DECON program. Please let me know if I can be of further assistance.

Jack

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In a message dated 5/1/2012 1:14:47 P.M. Eastern Daylight Time, [labriola@i-s-r.ca](mailto:labriola@i-s-r.ca) writes:

Hello Dr. Tawil,

I've recently come across a Pacific Northwest Laboratory document describing, in detail, the logic and inner-workings of the DECON code, for use in planning decontamination activities in the event of a nuclear accident. You are the primary author.

I find the code very detailed and quite frankly, very well put together. However, I'm curious as to what became of it. This work should have become the standard in the US, but I can't find any use or mention of the DECON code past the mid eighties.

Is there a story about DECON, and why it never emerged to become a widely used program? I am very interested in learning the history of the DECON program I you are willing to share it.

Thanks,

**Michael Labriola**