

Loudoun NATS Response to:

***Evaluation of Health Concerns in Waterford Virginia and Their Possible Association with Biosolid Applications***

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NATS believes that the Loudoun County Health Department “health evaluation” is a superficial review which has the effect of defending the county sludge program (which the Health Department oversees). The report of the Health Department concludes: “...there is no evidence that the application of biosolids is the cause of the bulk of infections or ailments noted.” There are many problems with the investigation that undermine the report’s conclusion.

We believe the most egregious problem is that the two basic assumptions of the report are **NOT scientifically valid**. In fact, they claim the **opposite** of what is found in scientific literature. Numerous requests were made (including an FOIA request) to obtain the documentation or citations. Dr. Goodfriend refused to provide them.

1) The first assumption says, “Studies have consistently shown that once biosolids have been applied and been allowed to dry, pathogens contained in them are not transported in air.” Available studies, **including the NIOSH Hazard ID attached to the “investigation”** say the opposite. NIOSH says “Class B biosolids should be incorporated (thoroughly mixed) into the soil to prevent suspension into the air during dryness.” (Most Loudoun County Class B sludge is left on the surface.)

2) The second assumption is “Odor is most common complaint associated with biosolids. Although odor is not considered to be a direct health hazard, it may indirectly impact...” Again, available scientific literature, including pro-sludge scientists, acknowledge odors cause respiratory and other illnesses.

If you accept these assumptions, the logical conclusion would be sludge spread on farmland surrounding neighborhoods cannot cause illness.

Additional problems with the evaluation:

A) Only one source is cited, the attached NIOSH report. More important is what was NOT used:

1) CDC warnings of sludge danger are omitted.

2) 2 EPA Inspector General’s reports sharply critical of the Sludge Rule are omitted. The 1996 EPA IG report says “...**while EPA promotes land application, EPA cannot assure the public that current land application practices are protective of human health and environment.**” USEPA Biosolids Management and Enforcement Audit Report 2000-p-10

3) No statistics on the number of certain illnesses in normal populations are provided as comparison to the experience in Waterford.

4) THE MERCK MANUAL 16th edition, common physicians' handbook that says there is a risk of infection from exposure to gases associated with sludge is ignored

B) The report does not mention nor explain:

- 1) The need for multiple courses of medication.
- 2) Failure of traditional cures for the Waterford illnesses.
- 3) Pneumonia in August.
- 4) Reports of unusually long and virulent illnesses.
- 5) The need of Waterfordians to go to multiple doctors because they were unable to get diagnosis or find causes for their illnesses.

C) Signature sludge illnesses (like lesions/rectal bleeding) reported on surveys but omitted in evaluation.

D) 44 surveys emailed to the Health Department only 33 reported in evaluation. (Some included surveys had signature illness omitted.)

E) The evaluation only listed 3 sludged fields affecting Waterford. In fact there were about 20 spread with Class B sludge. Additional fields were spread with Class A or EQ.

F) The date on the Brown Farm Field (the one acknowledged field) is wrong resulting in the false information that the spreading and illnesses are separated by more time than a year.

G) At a Waterford meeting in July 2002, Dr. Goodfriend said only one field affected Waterford health, the Brown Farm field, **even though there were three fields listed in the evaluation.** The date for application on the Brown farm field is incorrectly reported in the evaluation. We believe listing the spread date for Brown's field as May 2000 rather than July/August 2000 (the true spread date) allowed him to report "the field was spread more than a year before the illnesses; therefore, the sludge could not have caused the illnesses." (NIOSH and EPA say there is a one year restricted period.) At the meeting he would not acknowledge that there were two other fields listed in his own report. We believe acknowledging them would ruin the theory that the field was spread OVER one year before illnesses. The other two fields were spread July/August 2001 exactly concomitant with illnesses. **NOTE** There were at least 14 additional fields spread July-December 2001, **all concomitant with illnesses but not reported in the evaluation.**

Fields applied	July, August, October, November, and December 2001
Waterford Illnesses Reported	Aug. 2001- Jan 2002

H) **No participants in the survey were ever contacted by Dr. Goodfriend, nor were medical records checked.**

NOTE:

**The updated July 2002 NIOSH report says: "Do we know these pathogens can cause disease? Yes...These enteric organisms are usually associated with self-limiting gastrointestinal illnesses but can develop into more serious diseases in sensitive populations such as immune-compromised individuals, infants, young children, and especially the elderly." (Bold added, see links for full report)**