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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

SEP 28

CERTIFIED MAIL NO.:
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10097787

4WM-WPEB

Tommy Naylor Farm #1 and #2
Mr. James Odum Naylor
Mr. Tommie Lee Naylor
Mr. James Earl Naylor
12785 U.S. Highway 421
Newton Grove, North Carolina 28366

SUBJ: **EMERGENCY ADMINISTRATIVE ORDER**
Docket No.: SDWA-04-2001-0003

Dear Sirs:

The U.S. Environmental Protection Agency (EPA or the Agency) hereby issues to Tommy Naylor Farm #1 and #2, James Odum Naylor, Tommie Lee Naylor, and James Earl Naylor the enclosed Emergency Administrative Order pursuant to Section 1431 of the Safe Drinking Water Act, 42 U.S.C.A. § 300i. Under the authority granted in Section 1431, where EPA receives information that a contaminant which is present in or is likely to enter a public water system or an underground source of drinking water may present an imminent and substantial endangerment to the health of persons, the Agency may take such action as may be necessary to protect the health of such persons.

This Emergency Administrative Order is issued based upon evidence which shows that nitrate is present in the ground and in the underground source of drinking water underlying the Naylor Farm facility and has migrated off the facility property. The Agency has determined that the presence of high levels of nitrate in nearby residential water supply wells presents an imminent and substantial endangerment to persons drinking from wells contaminated by Naylor Farms' operations.

The State of North Carolina (State) concurs with the Agency in issuing this Administrative Order and has supported and worked cooperatively with the Agency in the development of this order. The State provided data results to the Agency regarding private well contamination which was used, in part, as the basis of this Order. The State has also notified the Agency that it has amended Naylor Farms' Certificate of Coverage to require the inclusion of a ground water monitoring requirement.

Should you violate or fail or refuse to comply with this Emergency Administrative Order issued under Section 1431 of the Safe Drinking Water Act, you may, in an action brought in the appropriate United States District Court to enforce such order, be subject to a civil penalty not to exceed $15,000 for each day in which such violation occurs or failure to comply continues.

Within seven (7) calendar days after your receipt of this Emergency Administrative Order, you may request a conference with EPA regarding this Emergency Administrative Order. At any conference held pursuant to the request, you may appear in person or be represented by an attorney or other representative. You must notify us of your intent to comply with this Emergency Administrative Order, in accordance with Paragraph 60 of the Emergency Administrative Order, within 5 days of your receipt of this Emergency Administrative Order, regardless of whether a conference is requested.

If a conference is held, you may present any information or comments regarding this Emergency Administrative Order. This conference is not an evidentiary hearing, does not constitute a proceeding to challenge this Emergency Administrative Order, does not delay the effective date of this Emergency Administrative Order, and does not give you a right to seek review of this Emergency Administrative Order. Requests for a conference, or any written submittal under this paragraph, shall be directed to Ms. Margaret Kroening, Associate Regional Counsel, at 61 Forsyth Street SW, Atlanta, Georgia, 30303-8960, (404) 562-9579.

Enclosed is a supplemental information sheet for small businesses which you may find useful. It explains your right to comment on regulatory enforcement activities pursuant to the Small Business Regulatory Enforcement and Fairness Act.

If you have any questions regarding this matter, you may contact Ms. Anne Keller, Acting Chief, Eastern Enforcement Section, at (404) 562-9942. If your attorney has questions, he or she should contact Ms. Margaret Kroening, Associate Regional Counsel, at (404) 562-9579.

Sincerely,

A. Stanley Meiburg
Acting Regional Administrator

Enclosure

cc: Mr. William, G. Ross, Jr., Secretary - NCDENR
Mr. Arthur Mouberry - NCDENR
Mr. John Rouse - Sampson County Health Department

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4

IN THE MATTER OF	)	EMERGENCY ADMINISTRATIVE ORDER
Tommy Naylor Farm #1 and #2 Mr. James Odum Naylor Mr. Tommie Lee Naylor Mr. James Earl Naylor 12785 U.S. Highway 421 Newton Grove, North Carolina 28366	)	PURSUANT TO SECTION 1431(a) OF THE SAFE DRINKING WATER ACT, 42 U.S.C. § 300i(a)
Respondents	)	DOCKET NUMBER: SDWA-04-2001-0003

I. STATUTORY AUTHORITY

1. The United States Environmental Protection Agency ("EPA"), Region 4, issues this Emergency Administrative Order ("ORDER") pursuant to the authority granted by Section 1431(a) of the Safe Drinking Water Act (hereinafter referred to as "the Act" or "SDWA"), 42 U.S.C. § 300i(a). This authority has been delegated to the Regional Administrator of EPA, Region 4.

II. DEFINITIONS

2. For purposes of this ORDER, the term "underground source of drinking water" ("USDW") means, in part, an aquifer or its portion which contains a sufficient quantity of ground water to supply a public water system and currently supplies drinking water for human consumption or contains fewer than 10,000 milligrams per liter ("mg/l") total dissolved solids, and which is not an exempted aquifer. See, 40 C.F.R. § 144.3.

3. For purposes of this ORDER, the term "aquifer" means a geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring. See, 40 C.F.R. § 144.3.

4. The term "Geoprobe" means a truck-mounted system which is a direct push, hydraulic, and percussion drive-point sampling system designed to collect discrete soil and ground water samples.

5. The phrase "agronomic rate" means the quantity of animal waste or process wastewater that, when added to the soil over a certain period of time by mechanical means or direct deposition of

animal waste, will achieve crop production goals while meeting applicable water quality standards.

6. The term "down gradient" means in the direction of the flow of ground water in the surficial aquifer.

7. "Day" or "days" means a calendar day or calendar days unless otherwise specified. When the day a report or other deliverable is due falls on a Saturday, Sunday, federal holiday, or legal holiday, Respondents shall have until the next calendar day which is not one of the aforementioned days to submit the report or other deliverable.

8. The term "contaminant" means any physical, chemical, biological, or radiological substance or matter in water. See 42 U.S.C. § 300f(6).

9. "Section" shall mean a portion of this Consent Decree identified by a Roman numeral.

10. "Paragraph" shall mean a portion of this Consent Decree identified by an Arabic numeral.

11. All terms not defined herein shall have their ordinary meaning, unless such terms are defined in the SDWA or its implementing regulations, in which case the statutory or regulatory definitions shall apply.

III. FINDINGS OF FACT

Based on the information in its possession, particularly that contained in the Administrative Record, EPA makes the following findings of fact:

12. The Respondents to this Emergency Administrative Order are Tommy Naylor Farm #1 and #2, James Odum Naylor, Tommie Lee Naylor, and James Earl Naylor (hereinafter "Respondents").

13. Tommy Naylor Farm #1 and #2 consist of two swine facilities (Farm #1 and Farm #2) located at 12785 U.S. Highway 421, Newton Grove, Sampson County, North Carolina 28366. A General Permit-Liquid Animal Waste Operations was issued to Tommy Naylor Farm #1 and #2 in 1997 under the State of North Carolina's Administrative Code, Chapter 15A, Section 2H .0217. The General Permit, which is a non-discharge permit, authorizes the operation of animal waste management systems in the State. The permit lists the land owner as James Odum Naylor and the farm managers as Tommie Lee Naylor and James Earl Naylor. The permit's waste plan combines both Farm #1, which is located across the road from 2618 Bud Johnson Road, and Farm #2, which is located south of Farm #1 on Bud Johnson Road. Together, the two farms occupy approximately 160 acres. This Emergency Administrative Order pertains only to Farm #2 (hereinafter "Farm #2").

14. Pursuant to Section 1401(12) of the SDWA, 42 U.S.C. § 300f(12), the term "person" means, *inter alia*, an individual, corporation, company, association, or partnership.

15. Farm #2 has been in existence since at least 1993. Since that time, Farm #2 has operated a waste lagoon and spray irrigation disposal system for the purpose of disposing of wastes generated by swine. The hogs from Farms #1 and #2 combined produce approximately 12,000 tons of waste per year, which is equivalent to 2,800,000 gallons of waste per year. The buildings on each farm contain an animal waste flushing system which discharges waste to a waste lagoon on each farm. The hog waste is then transported through underground pipes to any spray field on Farm #1 or Farm #2.

16. Respondents continue to operate the waste lagoon and spray irrigation disposal system for the purposes set forth in Paragraph 15.

17. Farm #2, which is the subject of this Emergency Administrative Order, lies northeast and up gradient of several private residential wells and includes two rectangular-shaped covered buildings which house approximately 1,224 swine. A map of Farm #2 and surrounding area is attached as Exhibit 1. The waste lagoon for Farm #2, which is located to the east of the buildings, is rectangular in shape. Based on satellite imagery taken in 1993, the waste lagoon is estimated to have a surface area of 74,250 square feet.

18. The area surrounding the waste lagoon and buildings at Farm #2 consists of a berm, spray application areas, and woodlands. The waste lagoon and buildings are bounded by spray application areas to the north and south, and by woodlands to the east. To the west is Bud Johnson Road. The ground surface at Farm #2 slopes to the south and southwest to a crop field onto which lagoon waste water is applied by way of spray irrigation disposal methods. This sprayfield at Farm #2 is bordered along the western edge with ground cover and is adjacent to Bud Johnson Road. Five homes with private drinking water wells are located south and southwest of Naylor Farm on both sides of Bud Johnson Road.

19. Farm #2 is located in North Carolina's inner coastal plain, which consists of a series of alternating sand and shale units. The area beneath Farm #2 and the surrounding residential water supply wells consists of an unnamed surficial aquifer, which currently supplies drinking water for human consumption to the residential wells. The productive zones of this aquifer consist of sand with yields reported in the range of 5-25 gallons per minute, which is sufficient to supply a public water system. Therefore, the aquifer is an underground source of drinking water within the meaning of 40 C.F.R. §144.3. Private wells in this area reportedly are completed to depths of 25 to 30 feet and have adequate yield to supply the needs of a household. The soils in this area are characterized as being well-drained loamy sands indicating good infiltration capacity. Such characteristics make the aquifer vulnerable to infiltration of contaminants from improperly lined waste lagoons and spray fields where application rates exceed the agronomic rates.

20. Swine produce considerable amounts of nitrogenous organic waste, typically in the range of six to eight pounds of manure per 100 pounds of weight per day. The concentrations of ammonia and nitrate in swine effluent can be considerable, as ammonia is produced by the breakdown of waste fluids. Where aerobic conditions are present, such as is typical in a surficial aquifer, ammonia will be converted to nitrate and nitrite. Due to their high solubility, ammonia and nitrate will readily leach into ground water. Plants can uptake nitrates and nitrites, but only in limited quantities. Quantities of nitrates and nitrites in the soil in excess of levels which can be used by plants will often migrate to ground water where they may adversely impact private wells.

21. Section 1431(a) of the SDWA, 42 U.S.C. § 300i(a), states as follows:

> *Notwithstanding any other provision of this subchapter, the [EPA], upon receipt of information that a contaminant which is present in or is likely to enter a public water system or an underground source of drinking water may present an imminent and substantial endangerment to the health of persons, and that appropriate State and local authorities have not acted to protect the health of such persons, may take such actions as [EPA] may deem necessary in order to protect the health of such persons. To the extent [EPA] determines it to be practicable in light of such imminent endangerment, [EPA] shall consult with the State and local authorities in order to confirm the correctness of the information on which action proposed to be taken under this subsection is based and to ascertain the action which such authorities are or will be taking. The action which [EPA] may take may include (but shall not be limited to) (1) issuing such orders as may be necessary to protect the health of persons who are or may be users of such system (including travelers), including orders requiring the provision of alternative water supplies by persons who caused or contributed to the endangerment, and (2) commencing a civil action for appropriate relief, including a restraining order or permanent or temporary injunction.*

22. The SDWA requires EPA to publish maximum contaminant level goals ("MCLGs") for contaminants which, in the judgment of the Administrator, may have an adverse effect on the health of persons and which are known or anticipated to occur in public water systems. See, 42 U.S.C. § 300g-1(b). A maximum contaminant level goal is to be set at a level at which no known or anticipated adverse effects on the health of persons occur and which allows an adequate margin of safety. See, 40 C.F.R. § 141.2.

23. At the same time EPA publishes an MCLG, it must also promulgate a National Primary Drinking Water Regulation which includes either (1) a maximum contaminant level ("MCL") or (2) a required treatment technique known to reduce levels of the contaminant. See, 42 U.S.C. § 300g-1(a) and § 300f(1). The term "maximum contaminant level" (MCL), means the maximum permissible level of a contaminant in water which is delivered to any user of a public water system. An MCL must be set as close to the MCLG as is feasible. Both the MCLG and MCL for nitrate have been set at 10 mg/l. See, 40 C.F.R. § 141.62 and 40 C.F.R. § 141.51.

24 The substance nitrate is a "contaminant" within the meaning of Section 1401(6) of the SDWA, 42 U S C § 300f(6)

25 The EPA has determined that nitrate poses an acute health concern at certain levels of exposure. See, 40 C.F.R § 141 32(e)(20) Nitrate in drinking water is colorless and odorless. Ingestion of nitrate, which is converted to nitrite in the body, interferes with the oxygen carrying capacity of blood, potentially resulting in cyanosis and, at higher levels, asphyxia High levels of nitrate in water can lead to high levels of nitrite in infants, resulting in a blood disorder known as methemoglobinemia ("blue baby syndrome") that can be fatal if left untreated Infants up to 3 months of age are the most susceptible with regard to nitrate. This is due to the fact that about 10 percent of ingested nitrate is transformed to nitrite in the adult and child, whereas 100 percent of ingested nitrate can be transformed to nitrite in the infant In particular, infants with a weight of less than 4 kilograms (8.8 lbs.) represent a high risk subpopulation. Pregnant women, adults with reduced stomach acidity, and individuals deficient in the enzyme that changes methemoglobin back to normal hemoglobin are all susceptible to nitrite-induced methemoglobinemia. Prolonged intake of high levels of nitrate has been linked to gastric problems due to the formations of nitrosamines, which have been shown to cause cancer in test animals. Elevated levels of sodium nitrate consumption have been associated with symptoms of marked hypertension including sharply decreased venous pressure, decreased systolic pressure, increased diastolic pressure, increased heart rate, and deep respirations. Lifetime exposure to levels of nitrate above 10 mg/l may also cause hemorrhaging of the spleen, diuresis, and increased starchy deposits.

26. Studies have shown that at concentrations greater than 10 mg/l in drinking water, nitrate poses a health threat to children under 6 months of age This level was based on human case studies in which fatal poisonings occurred following ingestion of well water containing nitrate concentrations greater than 10 mg/l. Therefore, at concentrations greater than 10 mg/l, nitrate in drinking water presents an imminent and substantial endangerment to the health of persons.

27 Ground water sampling has been conducted near Farm #2 on several occasions. After a summer of spills, accidents, and dumping of waste at farms across the region, the North Carolina Department of Environment and Natural Resources ("NCDENR") offered a free well testing program, from 1995 to 1998, to owners of private drinking water wells located near large livestock farms. Private wells in Sampson County were sampled as a result of this program.

28 Under the NCDENR's well testing program, samples were taken from several private water supply wells near Farm #2. Samples were taken from the wells of the [redacted] These three wells are located [redacted] d [redacted] d. The [redacted] well is located approximately [redacted]

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[redacted] The results of NCDENR's sampling of private wells near Naylor Farm were as follows. [redacted] on December 20, 1995, it had a nitrate concentration of 9.47 mg/l, and on January 29, 1996, it had a nitrate concentration of 5.79 mg/l; [redacted] January 29, 1996, it had a nitrate concentration of 10.93 mg/l; (3) [redacted] on January 29, 1996, it had a nitrate concentration of 10.74 mg/l.

29. On April 15, 1997, a study entitled "Nitrate Source Investigation Study, Selected Wells in Sampson County, North Carolina" was prepared by Law Engineering and Environmental Services on behalf of the North Carolina Pork Council. The study was based, in part, on samples taken on February 10, 1997, from two of the private wells located near Farm #2. The wells referenced in the Pork Council's report belong to the [redacted] listed in the paragraph above. The report indicates that the [redacted] had a nitrate concentration of 11.30 mg/l, and the [redacted] had a nitrate concentration of 8.65 mg/l.

30. In August 1999, EPA Region 4's Water Programs Enforcement Branch conducted an initial site screening to identify contaminated private wells near Farm #2. EPA conducted this screening to validate and confirm results from the NCDENR's database of nitrate-contaminated private water supply wells. The screening was conducted using a Hach kit, model DR 700/Colorimeter, to determine if elevated nitrate was present in the wells. This initial site screening did reveal the presence of nitrate contamination in the private drinking water wells near Farm #2.

31. Based on the results of the August 1999 initial site screening, which indicated elevated levels of nitrate in the private wells near Farm #2, EPA conducted a pre-investigation reconnaissance along Bud Johnson Road on August 15, 2000. The purpose of the reconnaissance was to confirm the results of the initial screening. The samples collected during the reconnaissance showed that four of the five private wells were contaminated with nitrate concentrations above the level at which adverse health effects are known to occur. The results of the samples taken during the reconnaissance are as follows: [redacted] had a nitrate concentration of 16 mg/l; [redacted] had a nitrate concentration of 12 mg/l; [redacted] had a nitrate concentration of 13 mg/l; and [redacted] had a nitrate concentration of 16 mg/l. Additionally, a sample was taken of [redacted] well [redacted] The [redacted] and, [redacted], is believed to be unaffected by potential sources of nitrate in the Naylor Farm area. [redacted], it was tested for the purpose of obtaining an ambient, or background, sample. The [redacted] ell had a nitrate concentration of 1.5 mg/l. Based on the sampling results from the pre-investigation reconnaissance, a full investigation was scheduled.

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32. Prior to beginning field investigation activities at Farm #2 and the surrounding area, EPA consulted with NCDENR to discuss EPA's reconnaissance sampling results and EPA's approach to and reason for collecting additional field data. The Raleigh office of the NCDENR asked EPA to contact the Fayetteville Regional Office to discuss the logistics of the investigation and to discuss opportunities for the State to obtain split samples during the sampling activities.

33. EPA has been in consultation with the NCDENR since 1999 concerning the issue of ground water contamination caused by swine facilities. The two agencies have been working together through meetings, telephone conferences, and correspondence to discuss the problem and to evaluate their respective legal authority to take action in response to the contamination. Since the beginning of this investigation, EPA has kept NCDENR apprised of its activities with respect to Farm #2. Representatives of the NCDENR accompanied EPA during some of the inspection activities at Farm #2, and the two agencies have shared data and information with respect to the investigation. EPA has informed the State of North Carolina of its intention to issue this Emergency Order. During a meeting on August 9, 2001, in which the Farm #2 investigation and enforcement action were discussed, representatives of NCDENR agreed that EPA should proceed with this emergency action.

34. By way of a letter dated September 27, 2001, the NCDENR informed EPA that "[d]ue to the documented groundwater standard violations in the private drinking water supply wells adjacent to Farm #2, the State of North Carolina is amending the Certificate of Coverage #AWS820301 for Tommy Naylor Farm #1 and #2 to require the inclusion of groundwater monitoring requirement [sic]."

35. During the week of August 21, 2000, EPA conducted its investigation of Farm #2 and the surrounding residential area. Representatives of the NCDENR accompanied EPA during the investigation. The purpose of EPA's investigation was to determine the source(s) of nitrate contamination previously identified in private water supply wells in the area. Ground water samples were taken from Farm #2 using Geoprobe sampling equipment. Samples were also taken from the waste lagoon and from private water supply wells near Farm #2. No samples were collected from Farm #1 during this investigation.

36. In November 2000, EPA prepared a report entitled, "Environmental Investigation -- Bud Johnson Road Ground Water Contamination Site -- Sampson County, North Carolina", which included the results of the samples taken during the August 2000 investigation of Naylor Farm and the surrounding area. The sampling results showed that all of the ground water samples taken from Farm #2 during the investigation had nitrate values that exceeded 10 mg/l, which is the level above which adverse health effects are known to occur. Nitrate levels in the ground water under the Farm #2 sprayfield ranged as high as 110 mg/l. Another sample taken at the southwestern edge of the sprayfield had a nitrate reading of 52 mg/l. This sample was taken from the area of the sprayfield which is located just up gradient of three private drinking water wells.

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37 Samples taken from the private wells near Farm #2 during the August 2000 investigation revealed the following (1)[redacted] had a nitrate concentration of 24 mg/l, (2)[redacted] had a nitrate concentration of 20 mg/l, (3)[redacted] had a nitrate concentration of 13 mg/l, (4)[redacted] had a nitrate concentration of 15 mg/l, and (5) the[redacted] had a nitrate concentration of 18 mg/l

38. The sampling results listed in Paragraph 37 indicate that drinking water in the five private wells near Farm #2 contains nitrate at levels which have been shown to cause adverse health effects EPA hired a toxicologist to review the sampling results from the investigation of Farm #2 The toxicologist confirmed that the nitrate levels found in the private wells near Farm #2 do pose a serious health threat to persons drinking water from those wells and recommended that the residents be provided with an alternate source of drinking water as soon as possible. Each of the private water supply wells draws ground water, which is used by the families for drinking, food preparation and cooking, dish washing, oral hygiene, and bathing, from the surficial aquifer, which is an underground source of drinking water

39 The general ground water flow direction of the surficial aquifer in the area of Farm #2 is towards the west and southwest beneath the facility and continuing in a southwesterly direction toward the private residences located down gradient of Farm #2 A contour map of the water table elevation and ground water flow direction is attached as Exhibit 2

40. Nitrogen, and its various chemical compounds, in the soil or in the air can go through a number of complex physical, chemical, and biological changes, combine with organic or inorganic material; and return back to the air or soil in a continuing cycle known as the nitrogen cycle. The nitrogen cycle is often depicted as a schematic diagram or model that shows the cycling of nitrogen in its various forms through the atmosphere, soil and water, and plants and animals. Part of the nitrogen cycle shows the change which can occur that results in the conversion of ammonia (NH_3) from animal waste to nitrate (NO_3) This is called nitrification, and it occurs when oxygen levels in the soil are high As a result of the nitrification process, when animal waste is deposited into the ground, the ammonia in the waste is oxidized by bacteria in the soil thereby converting it into nitrate

41 The data from Farm #2 show changes in the compounds of nitrogen consistent with the nitrification process and the movement of ground water in the surficial aquifer as the hog waste moves from the waste lagoon, to ground water at the facility, and finally to the three private water supply wells down gradient of Farm #2 A sample of the waste lagoon taken by EPA during the August 2000 investigation revealed levels of ammonia at 470 mg/l and no detectable levels of nitrate The ground water sample taken by the Geoprobe nearest to the waste lagoon at the shallow zone of the surficial aquifer showed 0 09 mg/l of ammonia and 31 mg/l of nitrate At the same location, but at the deeper sampling zone of the surficial aquifer, ammonia was found at 0 10 mg/l and nitrate at 110 mg/l These sampling results indicate that the nitrification process

has occurred, as the ammonia levels have dropped significantly while the nitrate values have increased.

42. In addition to nitrate sampling, EPA also took a number of samples designed to analyze the isotopic composition of the nitrate found in the waste lagoon and ground water at Farm #2 and in the surrounding residential water supply wells. Numerous studies have shown that measurements of nitrogen isotopes can be useful in the nitrogen contamination source determination. Specifically, the two stable isotopes of nitrogen, ^{14}N and ^{15}N, are useful in evaluating sources of nitrate contamination. In particular, the measurement of the ^{15}N isotope can be used in conjunction with site-specific information concerning hydrology to identify sources of nitrate contamination. Measurements of ^{15}N levels are generally expressed as a δ (delta) value, which indicates the difference between a sample and reference standard of atmospheric nitrogen. The level of ^{15}N in a sample is useful in evaluating sources of nitrate contamination because specific ^{15}N values can be attributed to particular sources of nitrate. Numerous studies have shown that fertilizer and rainwater generally have $\delta\ ^{15}N$ values in the range of ±5 permil ("‰") of the level found in the atmosphere. The research also demonstrates that there is an enrichment of ^{15}N in manure and septic waste over the levels found in rainwater and fertilizer. Studies have shown that the $\delta\ ^{15}N$ levels found in liquid and/or semi-liquid animal waste or sewage generally range between 10 and 25 ‰ of the level found in the atmosphere.

43. With respect to Farm #2 and the surrounding areas, where elevated levels of nitrate are located, the ^{15}N analytical data can be used to link the nitrate contamination to hog waste from Farm #2. The Farm #2 waste lagoon $\delta^{15}N$ value is 22.9‰. The Geoprobe ground water samples obtained at the facility had a $\delta^{15}N$ value between 9.5‰ to 17.7‰. These sampling locations are down gradient of the lagoon and surround the sprayfield. Of the three private wells located hydrogeologically down gradient of Farm #2, the well belonging to the [redacted] was selected for isotopic analysis as well as nitrate sampling. The $\delta^{15}N$ value of the ground water in this [redacted] was 10.2‰. The $\delta^{15}N$ readings of the waste lagoon, ground water samples taken from the facility, and the [redacted] well referenced above all fall within the range of values generally attributed to animal waste sources of nitrate contamination.

44. Analysis of ^{15}N was not conducted for the [redacted] well located at [redacted] or for the [redacted] family well. However, these wells are located hydrogeologically directly down gradient from the Farm #2 waste lagoon and sprayfield area; therefore, it is reasonable to conclude that the nitrate contamination in these wells is also the result of the hog waste from Naylor Farm.

45. The [redacted] is located hydrogeologically side gradient of the Farm #2 spray field and had an $\delta^{15}N$ value of 6.6‰. EPA has concluded that the elevated nitrate level in this well is not the result of Farm #2's operations because the $\delta^{15}N$ value of 6.6‰ indicates a source other than hog waste is likely the source of the nitrate contamination and because the well is located side gradient of Farm #2 and, therefore, is not in the path of the contaminated ground water flow from the farm. Although an isotopic analysis was not

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conducted on the private well located at [redacted] e elevated nitrate level in this well is probably not caused by the operations of Farm #2 because this well is also located hydrogeologically side gradient of the Farm #2 spray field and, therefore, is not in the path of the contaminated ground water flow from the Farm. EPA's conclusion that the elevated nitrate levels in these two wells are not the result of Respondents' operations is further supported by the fact that both wells are topographically up hill from Farm #2.

46. While there are septic systems in the area near the residences surrounding Farm #2, they are generally located down or side gradient of each of the private water wells and are not considered likely sources of nitrate contamination. However, one septic tank is located up gradient of the well belonging to th[redacted] While a failing septic system can lead to elevated nitrate and $\delta^{15}N$ levels in nearby water supply wells, samples taken near the septic field indicate that the septic system northeast of [redacted] is not failing and therefore is not contributing to the nitrate contamination in this private well. This is supported by the ^{15}N analytical data obtained from a shallow Geoprobe ground water sample, which was taken south of the septic tank and side gradient of the private well; by low nitrate concentrations in that same shallow Geoprobe sample; and by the calculated shallow chloride concentrations. The $\delta^{15}N$ value at this shallow ground water sampling location was 7.1‰, which is not indicative of septic waste.

47. Chloride levels can also be an important indicator parameter for delineating plumes of contamination. Although chlorides were not one of the parameters measured during the investigation of Farm #2, EPA was able to calculate the chloride levels using measurements EPA obtained for conductivity and temperature. EPA's analysis of the calculated chloride concentrations reveals that the highest chloride levels are located on or near the Farm #2 sprayfield with chloride levels decreasing with distance from the farm. The distribution of chloride concentrations supports the conclusion that Farm #2 is the source of the nitrate contamination in the [redacted] nd the [redacted] The distribution of chloride concentrations also indicates that the septic tank referenced in the preceding paragraph is not contributing to the nitrate contamination in the well located at [redacted] Calculated chloride concentrations in the shallow zone of the surficial aquifer, where septic tanks are located, show decreasing chloride levels from Farm #2 to the residences at [redacted] Chloride levels in the area near the septic tank are anomalously low. As a malfunctioning septic system would likely result in an area of elevated chloride levels, the low chloride levels found around the septic system near [redacted] trongly suggest that the septic system is operating properly and not contributing to the nitrate contamination in the wells near Farm #2. Furthermore, ground water flow direction calculations indicate that the septic system in question is not contributing to nitrate contamination in th[redacted]

48. EPA has no record of any ground water cleanup or remedial activities at Farm #2. Upon information and belief, the nitrate contamination detected during EPA's sampling activities

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- remains in the surficial aquifer, and the facility continues to contaminate the surficial aquifer via spray irrigation activities and/or waste lagoon leakage

49 Pursuant to the SDWA Section 1431(a), 42 U S C § 300i(a)(1), EPA has had numerous communications with the State of North Carolina and local authorities regarding this endangerment Additionally, EPA has consulted with the State and local authorities on the correctness of EPA's findings and the data upon which this ORDER is based EPA will exercise its emergency authority under the SDWA, which authority is not transferable to the State or local government, in order to expeditiously abate the endangerment

IV CONCLUSIONS OF LAW

Based upon the foregoing Findings of Fact and the Administrative Record supporting this ORDER, EPA hereby concludes that·

50. Tommy Naylor Farm #1 and #2, James Odum Naylor, Tommie Lee Naylor, and James Earl Naylor are "person[s]" as defined in Section 1401(12) of the SDWA, 42 U S C. § 300f(12), and within the meaning of Section 1431 of the Act.

51. Respondents have caused or have contributed to the introduction to an underground source of drinking water of nitrate which is a "contaminant" within the meaning of SDWA § 1401(6), 42 U S C § 300f(6), and Section 1431 of the Act.

52. The contaminant introduced by Respondents is present in or likely to enter an underground source of drinking water.

53. The aquifer from which [redacted] and other unidentified families draw ground water is an "underground source of drinking water" within the meaning of 40 C F.R § 144 3 and Section 1431 of the Act

54. Respondents' introduction of a contaminant to the surficial aquifer, which is an underground source of drinking water, may present an imminent and substantial endangerment to the health of persons. Based on· (1) the studies indicating that nitrate concentrations greater than 10 mg/l in drinking water may cause adverse health effects, and (2) the toxicologist's review of the Naylor Farm sampling results which concluded that the nitrate levels in the private wells near Farm #2 do pose a threat to the health of persons drinking water from those wells, EPA has concluded that the elevated nitrate levels in the private wells may present an imminent and substantial endangerment to the health of persons

55 There exists a continuing threat of ground water contamination from Respondents' introduction of nitrate to the surficial aquifer for so long as Respondents' current waste management practices continue and the sources of nitrate contamination remain in place

56. To date, the actions taken by State and local authorities have not been sufficient to protect the health of the persons subject to the imminent and substantial endangerment presented by Respondents' introduction of nitrate to the underground source of drinking water. Furthermore, EPA has determined that the State and local authorities do not, at this time, intend to take the actions described in paragraphs 60 through 73 below.

57. EPA has consulted with the State and local authorities to confirm the correctness of the information upon which this ORDER is based and to ascertain what action those authorities intend to take. All requisite conditions have been satisfied for EPA to take action under Section 1431(a)(1) of the SDWA, 42 U.S.C. § 300i(a)(1).

58. EPA finds that there continues to be an imminent and substantial endangerment to the health of persons drinking water from the water supply wells contaminated by Respondents' activities and that the actions required by this ORDER are necessary to protect the health of persons who are currently consuming or who may consume or use water from the contaminated portion of the surficial aquifer.

59. Section 1431(a), 42 U.S.C. § 300i(a), specifies that the Administrator, upon receipt of information that a contaminant which is present in or is likely to enter a public water system or an underground source of drinking water may present an imminent and substantial endangerment to the health of persons, may issue such order as may be necessary to protect the health of such persons, including travelers.

V. ORDER

As a result of the above Findings of Fact and Conclusions of Law, and pursuant to the authority issued to the EPA Administrator by Section 1431(a) of the SDWA, 42 U.S.C.§ 300i(a), Respondents are hereby ORDERED to perform the following actions in the manner and by the dates specified below.

60. All work undertaken pursuant to this ORDER shall be conducted in accordance with the SDWA, its implementing regulations, and any other federal, state, or local laws. In performing the work required by this ORDER, Respondents shall utilize all relevant EPA guidance documents and any other documents determined by EPA to be relevant to the work being performed. Any noncompliance with the terms of this ORDER shall be construed as a violation of this ORDER. Oral advice or approvals given by EPA representatives will not relieve Respondents of their obligation to obtain any formal written approval required by this ORDER.

61. Within five (5) days after the receipt of this ORDER, Respondents shall notify Ms. Anne E. Keller, Acting Chief, Eastern Enforcement Section, by telephone at (404) 562-9942, whether Respondents intend to comply with the terms of this ORDER. Within forty-eight (48) hours after

Exemption 6 Personal privacy

providing the oral notice, Respondents shall confirm in writing, via facsimile sent to (404) 562-9729 or by first class mail sent to EPA and the State of North Carolina at the address in Paragraph 83 below, whether they intend to comply with this ORDER

62 Within 10 days of receipt of this ORDER, Respondents shall deliver an emergency supply of water for human consumption to residents of the [redacted] The households subject to the water provision requirements of this and the following paragraph can be seen on the map that is attached as Exhibit 1 This emergency supply of water for human consumption shall be provided at a rate of at least 75 gallons per day per resident Such water is to be provided at no cost to the residents Respondents' obligations under this Section shall extend to current and future owners and occupants of the [redacted] residences listed in this paragraph

63 Starting with the 7th day after the day of the initial delivery of water, and until otherwise notified in writing by EPA, Respondents shall deliver a sufficient amount of water for human consumption to the three families referenced in Paragraph 62, and any subsequent occupants of those properties, once every 7 days so that the families are provided with at least 75 gallons per day per resident of water for human consumption The water shall be delivered at the beginning of each 7-day period This amount may be adjusted in accordance with the actual usage by each household when approved in writing by EPA Such water is to be provided at no cost to the residents

64 The water for human consumption, required to be provided under Paragraphs 62 and 63, shall mean bottled water, bulk water from a tank truck, or water from some other source acceptable to EPA Such water shall meet the water quality requirements of 40 C F R § 141, Subpart G, for domestic uses and shall be provided in a place and container convenient to the residence

65 Within fourteen (14) days of receipt of this ORDER, Respondents shall notify the EPA of the residences receiving water and the quantity and dates of delivery Thereafter, Respondents shall submit monthly reports, which are due on the 15th of each following month, notifying EPA of the residences receiving water and the quantity and dates of delivery of such water

66 Within twenty-one (21) days of receipt of this ORDER, Respondents shall submit to EPA for approval a "Sampling Plan" to accomplish the following

(A) Provide for initial and continued monitoring of the private wells listed in Paragraph 62 on a calendar quarterly basis (July through September, October through December, January through March, April through June) for those parameters listed in Paragraphs 66(B) and 66(C) below until EPA determines that the ground water does not present an imminent and substantial endangerment to human health or until EPA terminates this ORDER

(B) Conduct analytical testing for the presence of the following contaminants. Each contaminant is followed in parentheses by the EPA method (see EPA Methods and Guidance for Analysis of Water, EPA 821-C97-001, April 1997): Nitrate (300.0); nitrite (300.0); ammonia (350.1); arsenic (200.7); barium (200.7); chloride (300.0); copper (200.7); sulfate (300.0); and zinc (200.7).

(C) Conduct total coliform analyses in accordance with one of the methods listed in 40 C.F.R. § 141.21(f)(3), and as contained in the latest edition of "Standard Methods for the Examination of Water and Wastewater," by the American Public Health Association. A well with a positive total coliform shall be further analyzed for the presence of *E. coli* and other parameters in accordance with 40 C.F.R. § 141.21(f)(7). The fecal coliform analysis shall be conducted in accordance with 40 C.F.R. § 141.21(f)(5). A well with a positive total coliform shall also be analyzed for fecal streptococcus, enterococcus, and salmonella in accordance with "Standard Methods for the Examination of Water and Wastewater".

(D) In the event that any of the constituents specified above are not detected within 8 consecutive rounds of sampling, Respondents may, upon written request to and approval by EPA, eliminate such analysis for said constituent(s).

67. The Sampling Plan shall include a schedule for Respondents' completion of the tasks outlined in Paragraph 66 and methods for implementing such tasks.

68. Respondents shall use best efforts to obtain access to property as needed to implement the Sampling Plan and other requirements of this ORDER.

69. Respondents shall follow the EPA Region 4 Environmental Investigations Standard Operating Procedures and Quality Assurance Manual and all other relevant EPA guidance for all sampling and analysis required pursuant to this ORDER. The Sampling Plan shall contain quality assurance/quality control and chain of custody procedures for all sampling, monitoring, and analytical activities. The plan shall provide that all samples shall be analyzed by a State or EPA-approved laboratory using an EPA-approved testing method pursuant to 40 C.F.R. § 141.24, or such other methods as EPA may approve. Any deviation from the approved plan must be documented, including the reason for the deviation, and must be approved in writing by EPA prior to implementation.

70. At the request of EPA, Respondents shall allow EPA or its authorized representatives to take split or duplicate samples of all samples collected by Respondents pursuant to this ORDER. Respondents shall notify EPA not less than 28 days in advance of sample collection activities unless shorter notice is agreed to in writing by EPA. In addition, EPA shall have the right to take any additional samples that EPA deems necessary. Similarly, at the request of Respondents, EPA shall allow Respondents or their authorized representative(s) to take split or duplicate

samples of all samples collected by EPA as part of EPA's oversight of the Respondents' implementation of this ORDER.

71. Within 30 days of the completion of each round of sampling required by the Sampling Plan, a letter containing the results of the analysis of the samples shall be sent to EPA, the State of North Carolina, and the Sampson County Health Department in accordance with Paragraph 83 of this ORDER.

72. Respondents shall continue to provide water for human consumption to each residence, in accordance with Paragraphs 62 and 63, until EPA determines that the residence's private well can consistently provide such water without contaminants at concentrations of concern or until otherwise notified in writing by EPA .

73. Within 180 days of receipt of this ORDER, Respondents shall submit to EPA a plan for providing a permanent alternative source of safe drinking water for the three wells that are the subject of this ORDER. When EPA approves a permanent alternative source of safe drinking water for any water supply well subject to this ORDER, implementation of said permanent alternative source of safe drinking water will release the Respondents from all other provisions of this ORDER with respect to that well(s) upon written notice of such by EPA. Respondents shall bear the costs of any required permits, any initial connection, and the installation of the permanent alternative water supply. Additionally, Respondents may be required to bear the costs of any maintenance and repair of said permanent alternative source of water, as applicable, unless the responsibility for such maintenance and repair legally rests with a state or local authority. EPA will notify Respondents in writing when they have successfully provided a permanent alternative drinking water source and thereby satisfied the requirements of this paragraph.

VI. EPA APPROVALS

74. EPA reserves the right to comment on, modify, and direct changes to any plan, report, specification, or schedule submitted pursuant to or required by this ORDER. When a document is submitted to EPA for approval, EPA shall provide Respondents with its written approval, approval with conditions and/or modifications, or disapproval. If such document submittal is disapproved, in whole or in part, EPA shall either (1) notify Respondents that EPA will modify the document to cure the deficiencies and require Respondents to implement such modifications or (2) direct Respondents to modify the document to cure the deficiencies. Revised submittals are also subject to EPA approval, approval with conditions and/or modifications, or disapproval.

75. Upon receipt of a notice of disapproval and/or notice directing modification of the document, Respondents shall, within 14 days, cure the deficiencies and resubmit the document for approval. Should EPA determine that Respondents have failed to cure any deficiencies, EPA reserves the right to modify the document to correct the deficiencies and to direct the Respondents to implement the document as modified.

76. Upon receipt of EPA's written approval, Respondents shall commence work and implement any approved plan in accordance with the schedule and provisions contained therein. If no schedule is contained in an approved plan, then Respondents shall commence work and implementation of the plan within 15 days of receipt of EPA's written approval of the plan. In the event EPA disapproves the plan, in whole or in part, EPA may require Respondents to implement any nondeficient portion of the plan.

77. Any EPA-approved plan, report, specification, or schedule shall be incorporated by reference into this ORDER as if set forth fully herein. Prior to EPA's written approval, no plan, report, specification, or schedule shall be construed as approved and final. Oral advice, suggestions, or comments given by EPA representatives do not constitute an official approval, nor shall any oral approval or oral assurance of approval be considered binding.

78. Noncompliance with plans, reports, specifications, or schedules approved by EPA pursuant to this ORDER shall be considered a violation of this ORDER and may subject Respondents to the statutory penalty provisions and/or enforcement actions pursuant to Section 1431 of the SDWA, 42 U.S.C. § 300i.

79. Any changes or modifications proposed by Respondents to the EPA-approved plans and timetables required by this ORDER must be approved in writing by EPA prior to implementation.

VII. PARTIES BOUND

80. The provisions of this ORDER shall apply to and be binding upon Respondents and their employees, agents, successors, and assigns, and shall apply whether or not Respondents' activities in connection with Farm #2 occurred while doing business by any other name. Notice of this ORDER shall be given to any successors in interest prior to transfer of the ownership or operation of Farm #2 or any portion thereof. Action or inaction of any person, firm, contractor, employee, agent, or corporation acting under, through, for or in participation with Respondents, shall not excuse any failure of Respondents to fully perform the obligations under this ORDER.

81. Respondents shall provide a copy of this ORDER to any and all business organizations, contractors, subcontractors, laboratories, or consultants which do business at the facility or are retained to conduct or monitor any portion of the work performed pursuant to this ORDER. A copy of the ORDER shall be provided within 7 days of the effective date of this ORDER or on the date of retention of such contractor, subcontractor, laboratory, or consultant.

82. Respondents shall give notice to EPA at least 30 calendar days prior to the sale, lease, or other transfer of ownership, operation, and/or management of Farm #2 or any portion thereof.

VIII. GENERAL PROVISIONS

83. All submittals pursuant to this ORDER shall be hand delivered, sent by certified mail (return receipt requested), sent by overnight certified express mail, or sent by overnight delivery service as follows:

Three (3) copies to:

a. Ms. Anne E. Keller, Acting Chief
Eastern Enforcement Section
U. S. Environmental Protection Agency, Region 4
61 Forsyth Street SW
Atlanta, Georgia 30303-8960

One (1) copy to each of the following:

b. Mr. Arthur Mouberry, Chief
Groundwater Section
North Carolina Department of Environment and Natural Resources
1636 Mail Service Center
Raleigh, NC 27699-1636

c. Ms. Theresa Underwood
Sampson County Health Department
360 County Complex Road
Clinton, NC 28328-4778

84. Each submittal shall include reference to the docket number as shown on the first page of this ORDER.

85. All plans, reports, notices, or other documents submitted by Respondents pursuant to this ORDER, which make any representation concerning Respondents' compliance or noncompliance with any requirement of this ORDER, shall be accompanied by the following statement signed by the Respondent(s) making the submission:

> "I certify under the penalty of law that this document and all attachments were prepared by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel gathered and evaluated the information submitted. Based on my inquiry of any and all persons directly responsible for gathering and analyzing the information obtained, I certify that the information contained in or accompanying this submittal is to the best of my knowledge and belief, true, accurate, and complete. As to those identified portion(s) of this submittal for which I cannot personally verify the accuracy, I certify that this

submittal and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

86. The certification shall also include the name, title, date, and signature of the person or persons completing the certification.

87. Respondents shall submit to EPA, the State of North Carolina, and the Sampson County Health Department, at the addresses listed in Paragraph 83, the results of all sampling, tests, or other data generated pursuant to this ORDER by Respondents or their agents, consultants, or contractors.

88. If any event occurs which causes delay in the achievement of any requirement of this ORDER, Respondents shall have the burden of proving that the delay was caused by circumstances beyond the reasonable control of Respondents or any entity controlled by Respondents, including but not limited to their contractors and consultants, which could not have been overcome by due diligence. Respondents shall notify EPA verbally within 72 hours, and in writing within 7 days of the verbal notification, of the anticipated length and cause of the delay, the measures taken and/or to be taken to prevent or minimize the delay, and the time table by which Respondents intend to implement these measures. If EPA agrees that the delay or anticipated delay has been or will be caused by circumstances beyond the reasonable control of the Respondents, the time for performance hereunder shall be extended for a period equal to the delay resulting from such circumstances. Respondents shall adopt all reasonable measures to avoid or minimize delay. Failure of Respondents to comply with the notice requirements of this paragraph shall constitute a waiver of Respondents' right to request an extension to meet the requirements of this ORDER.

89. Nothing in this ORDER shall be construed to limit or otherwise affect EPA's authority under any applicable law or regulation including but not limited to EPA's authority to conduct inspections, to seek access to property, to request the provision of information, or to bring a civil or criminal enforcement action under the Safe Drinking Water Act or other applicable statutes or regulations.

90. Respondents may assert a confidentiality claim covering all or part of any information submitted to EPA pursuant to this ORDER. Any assertion of confidentiality must be accompanied by information that satisfies the items listed in 40 C.F.R. § 2.204(e)(4) or such claim shall be deemed waived. Information determined by EPA to be confidential shall be disclosed only to the extent permitted by 40 C.F.R. Part 2. If no such confidentiality claim

accompanies the information when it is submitted to EPA, the information may be made available to the public by EPA without further notice to Respondents. EPA will not accept any confidentiality claim with regard to any physical or analytical data.

91. EPA, its contractors, employees, and representatives are authorized to enter and freely move about all property at Farm #2 pursuant to this ORDER for the purposes of, *inter alia*, interviewing facility personnel and contractors; inspecting records, operating logs, and contracts related to the facility; reviewing the progress of the Respondents in carrying out the terms of this ORDER; conducting such tests, sampling, or monitoring as EPA or its representatives deem necessary; using a camera, sound recording, or other documentary type equipment; and verifying the reports and data submitted to EPA by the Respondents. Respondents shall provide EPA and its representatives access to the facility at all reasonable times and to any other property to which access is required for implementation of this ORDER. Respondents shall permit such persons to inspect and copy all records, files, photographs, documents, and other writings, including all sampling and monitoring data, that pertain to work undertaken pursuant to this ORDER and that are within the possession or under the control of Respondents or their contractors or consultants.

92. Pursuant to Section 1431(b) of the SDWA, 42 U.S.C. § 300i(b), in the event that Respondents violate or fail or refuse to comply with the terms or provisions of this ORDER, EPA may commence a civil action in the appropriate U.S. District Court to require compliance with this ORDER and to assess a civil penalty of up to $15,000 for each day in which such violation occurs or failure to comply continues. Respondents shall be deemed severally liable in any such action. Failure to timely complete any requirement of this ORDER shall be deemed a violation of this ORDER, beginning on the first day that performance is scheduled to commence.

93. EPA expressly reserves all rights and defenses that it may have, including but not limited to the right to disapprove work performed by Respondents pursuant to this ORDER and to modify documents submitted by the Respondents and require that Respondents implement those modifications.

94. EPA hereby reserves all of its statutory and regulatory powers, authorities, rights, and remedies, both legal and equitable, which may pertain to Respondents' failure to comply with any of the requirements of this ORDER, including without limitation the assessment of penalties under 1431(b) of the SDWA, 42 U.S.C. § 300i(b). This ORDER shall not be construed as a covenant not to sue, release, waiver, or limitation of any rights, remedies, powers, and/or authorities, civil or criminal, which EPA has under the SDWA, or under any other statutory, regulatory, or common law authority of the United States. Nothing in this ORDER shall diminish, impair, or otherwise adversely affect the authority of EPA to enforce the provisions of this ORDER. This ORDER shall not be interpreted to relieve Respondents of their obligations to comply with any provision of the SDWA, its implementing regulations, or any other federal, state, or local law.

95. This ORDER shall not limit or otherwise preclude EPA from taking additional enforcement action, civil or criminal, pursuant to the SDWA, or any other available legal authority, should EPA determine that such action is appropriate. Issuance of this ORDER is not an election by EPA to forego any civil or criminal action otherwise authorized under the SDWA or other laws.

96. All actions required to be taken pursuant to this ORDER shall be undertaken in accordance with the requirements of all applicable local, State, and federal laws and regulations. Respondents shall obtain or cause their representatives to obtain all permits and approvals necessary under such laws and regulations to perform work pursuant to this ORDER and shall submit timely applications and requests for any such permits and approvals. Failure to obtain any necessary permits or approvals shall not constitute grounds for an extension pursuant to Paragraph 88 of this ORDER.

97. This ORDER may be modified or amended by EPA to ensure protection of human health and the environment. Such an amendment shall be in writing, shall have as its effective date the date on which it is received by Respondents, and shall be incorporated into this ORDER.

98. If any provision or authority of this ORDER, or the application of this ORDER to any party or circumstance, is held by any judicial or administrative authority to be invalid, the application of such provision(s) to other parties or circumstances and the remainder of the ORDER shall remain in force and shall not be affected thereby.

99. The Administrative Record supporting this ORDER is available for review by Respondents and the public on normal business days between the hours of 9:00 a.m. and 5:00 p.m. at EPA's regional office located at the Atlanta Federal Center, 61 Forsyth Street SW, Atlanta, Georgia. If additional information becomes available, EPA will amend the Administrative Record, if relevant and appropriate. To review the Administrative Record, contact Mr. Leonard Dangerfield, Water Management Division, EPA Region 4, at (404) 562-9316.

IX. OPPORTUNITY TO CONFER WITH EPA

100. Respondents have the opportunity to confer informally with EPA concerning the terms and applicability of this ORDER. Respondents must contact Peg Kroening, Associate Regional Counsel, (404) 562-9579, within seven (7) days of receipt of this ORDER to schedule such a conference. This conference is not an evidentiary hearing, does not constitute a proceeding to challenge the ORDER, and does not give Respondents a right to seek review of this ORDER. Any such conference with EPA will be held at the following location:

U.S. EPA Region 4
Atlanta Federal Center
61 Forsyth Street SW
Atlanta, Georgia 30303-8960

101. If EPA determines that any element of this ORDER, including work to be performed or scheduled, warrants modification after a conference is held, EPA will modify the ORDER in writing. The modification will be effective on the date that it is received by the Respondents.

X. EFFECTIVE DATE OF ORDER

102. This ORDER shall be effective immediately upon Respondents' receipt of the executed ORDER. If modifications are made by EPA to this ORDER, such modifications will be effective on the date received by Respondents. This ORDER shall remain in effect until the provisions identified in the ORDER have been met and EPA has certified its approval of the same in writing. This ORDER shall constitute final agency action for purposes of Section 1448 of the SDWA, 42 U.S.C. § 300j-7.

XI. TERMINATION AND SATISFACTION

103. The provisions of this ORDER shall be deemed satisfied upon Respondents' receipt of written notice from EPA that Respondents have demonstrated, to the satisfaction of EPA, that the terms of this ORDER have been satisfactorily completed.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 4

Date: 9/28/2001

By: _____
A. Stanley Meiburg, Acting Regional Administrator
U.S. Environmental Protection Agency
Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303-8960

CERTIFICATE OF SERVICE

I hereby certify that I have caused a copy of the foregoing ORDER (Docket No.: SDWA-04-2001-0003) to be served upon each of the person(s) designated below on the date below, by causing said copy to be deposited in the U.S. Mail, First Class (express mail certified, Return Receipt Requested), at Atlanta, Georgia, in a separate envelope addressed to:

Tommy Naylor Farm #1 and #2
Mr. James O. Naylor
Mr. Tommie Lee Naylor
Mr. James Earl Naylor
12785 U.S. 421
Newton Grove, North Carolina 28366

I have further caused the original and one copy of said ORDER and the Certificate of Service to be filed with the Regional Hearing Clerk, United States Environmental Protection Agency, 61 Forsyth Street SW, Atlanta, Georgia 30303-8960, on the date specified below.

Dated this _____ day of _____, 2001.

_____
Mary E. Halback
Environmental Protection Specialist

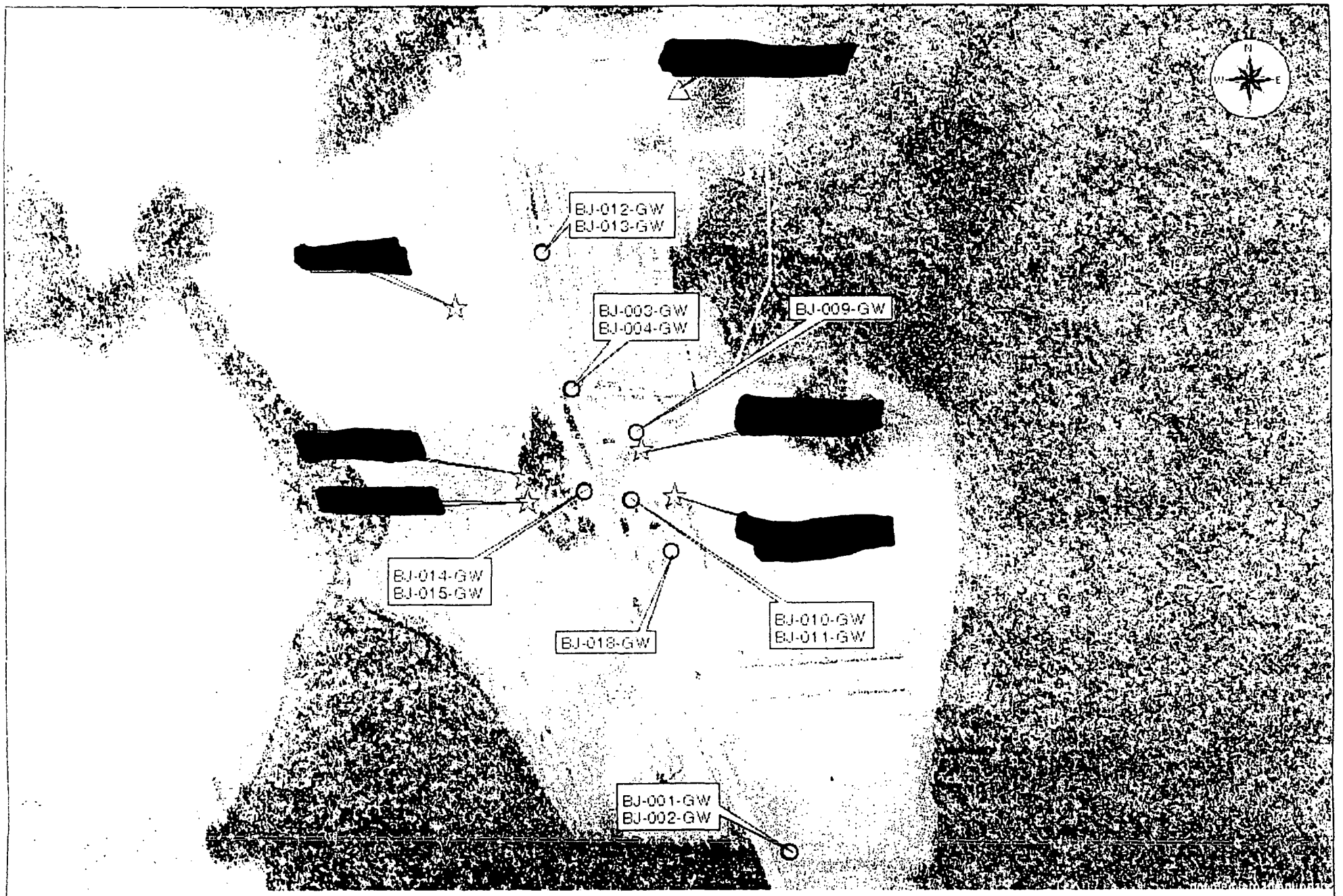


Figure 4. Boundary Location, Bud Johnson Road Contamination Site.

LEGEND
☆ Private Wells
○ GeoProbe Temp Wells
△ Lagoon Sample

0 200 400 600 800 1000 Feet

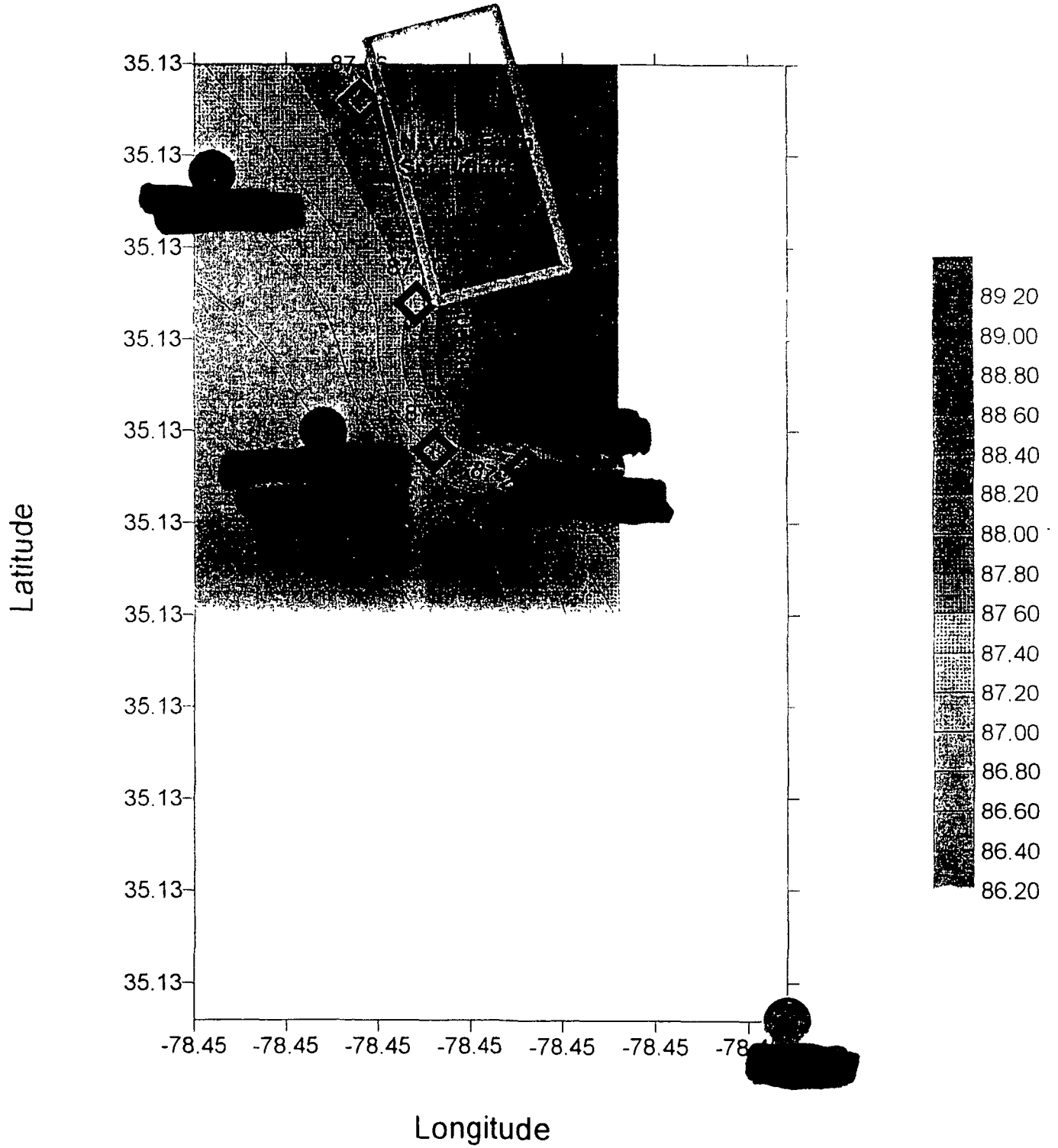
Taken from USGS DOQ

Water Table

Bud Johnson Road Area

Sampson County North Carolina

August 2000

Private Water Supply Well

Sample Locations