## NATURAL RESOURCES DEFENSE COUNCIL



March 13, 2013

West Virginia Department of Environmental Protection Office of Oil and Gas 601 57<sup>th</sup> Street SE Charleston, WV 25304 Attn: James Martin, Chief

## **Re:** Comments on Application for Renewal of State Underground Injection Control Permit UIC2D0190460, North Hills #1-A Well

Dear Mr. Martin:

The undersigned organizations write to provide comments on the draft Underground Injection Control (UIC) Permit renewal application of Danny E. Webb Construction, Inc. in Fayette County. We also request that a public meeting be scheduled to receive input concerning the proposal and to answer questions and concerns raised by the public.

The application for renewal of this UIC permit by Danny Webb Construction, Inc. raises significant concerns about the fitness of the company to operate a facility which handles toxic waste. It also calls into question the adequacy of the state's oversight of Class II D underground injection control wells and associated facilities, given the multiple violations and non-compliance with state orders by the company. The Department of Environmental Protection (DEP) must take swift action to protect state residents from the risks posed by oil and gas waste storage and disposal and restore the confidence of the public in DEP's dedication to upholding the law and protecting West Virginia residents.

Background:

In May 2002, Danny Webb Construction was issued a permit to operate Class II D oil and gas wastewater disposal well UIC2D0190460 (North Hills #1-A Well). In association with the injection wells at this site, Danny Webb Construction (DWC) also constructed two open pits at the site. According to a DEP document, these pits were only to be used for wastewater produced by coalbed methane operations. The pits were intended so that the coal fines in the water would settle out and not be injected into the disposal well.

In 2004, DEP received multiple complaints of a foul odor emanating from open pits that Danny Webb Construction was using to store waste fluids. The sulphurous odors reported by residents raise the concern that the odors were due to hydrogen sulfide, a poisonous and flammable gas. At low concentrations, exposure to hydrogen sulfide gas can cause irritation of the eyes and throat, shortness of breath, and nausea, while at higher concentrations exposure may be fatal. DEP's investigation did not determine whether the odors had been due to hydrogen sulfide or another toxic substance.

DEP investigated, finding that the problem had been due to an error by a truck driver, who had discharged fluids into one of the pits rather than into a closed container, thus allowing vapors to escape into the atmosphere.<sup>1</sup> Based on ongoing odor complaints, DEP required Danny Webb Construction to: (1) cease transporting fluids from the company (Bobcat Oil and Gas) that had produced the waste giving rise to the problems, (2) cease using the open pit at the site until further notice, (3) empty the pit, wash the liner, and dispose of all rinsate and residue in a tank or down the disposal well, (4) complete construction of a fence around the pit at the disposal well site, (5) conduct training and instruction to all truck drivers and operators at the site to ensure proper assessment and handling of fluids.<sup>2</sup>

Of these requirements, there is only evidence in the record to demonstrate that #4 was timely completed. There is some evidence that others were completed only much later, well after the requirements had been imposed. For instance, despite the order to stop accepting waste from Bobcat Oil and Gas in May 2004, there is a letter in the record from Danny Webb Construction to Bobcat Oil and Gas dated March 8, 2007, almost three years later, stating that DWC had

<sup>&</sup>lt;sup>1</sup> See Michael W. Lewis, UIC Program Director, West Virginia Department of Environmental Protection, Investigation Report and Findings: Danny Webb Construction (North Hills No. #3 Disposal Well) (May 20, 2004). <sup>2</sup> See Id.

"elected not to transport" further water from the company. The letter notes that DWC had already transported and accepted wastewater from Bobcat twice that year, apparently violating the DEP order. A note from a DEP staffer indicates that a worker training was conducted in 2008, approximately four years after the order was issued, and after a 2007 permit requirement which also insisted that the staff be trained. There is no evidence that DWC complied with the order to clean a pit or cease using it, which would be a serious violation, given the potential toxicity of oil and gas waste fluids. It is also unclear as to whether there was more than one pit in operation at this time and, if so, why the order only addressed one of them.

On January 5, 2007, DEP issued a notice of violation to Danny Webb Construction, noting that the company had not "follow[ed] the conditions of the permit" including failures to install culverts, a ditch line, and sediment control measures.

In May of 2007, Danny Webb Construction applied for a UIC permit renewal. DEP received numerous comments from local residents expressing opposition to the renewal of the permit, including from the Fayette County Health Officer. While many concerns were raised by the residents, a significant number mentioned ongoing problems with noxious odors. In addition, the DEP received a communication from an Underground Storage Tank Inspector noting that Mr. Webb had provided the inspector with conflicting stories about the activities at the site.<sup>3</sup> Despite these problems and concerns, DEP issued a renewed permit on October 25, 2007.<sup>4</sup> Among other requirements, the permit mandated that the permittee: (1) provide for security at the injection facility, including providing a locked gate and instructing all drivers to close and lock it if a Webb employee is not at the facility (2) conduct training and instruction to all truck drivers and operators at the site to ensure proper assessment and handling of fluids, and (3) have pit fluids pumped into the tank battery and have the pits permanently backfilled and their use discontinued. Danny Webb Construction did not appeal the imposition of these requirements in the permit.

On May 8, 2008, DWC was cited for underground injection into another well at the same site without a permit. On May 12, 2008, DWC was cited for failure to pump the fluid in the pits into tanks and close the pits within six months of permit issuance. On June 3, 2008, DEP personnel conducted another inspection and found that the other well onsite was still being operated

<sup>&</sup>lt;sup>3</sup> See Email from Rindy Clayton to Penny Harris (Sept. 11, 2007, 3:40pm) "Danny Webb at former Cook Motor Lines site off Lochgelly Rd." (noting that Mr. Webb had first indicated that a mixture of saltwater and diesel that had been in the underground storage tank had been pumped into the UIC well but later "changed his tune" saying it had not.

<sup>&</sup>lt;sup>4</sup> UIC Permit No. UIC2D0190460 (Oct. 25, 2007).

without a permit.<sup>5</sup> Despite a longstanding pattern of noncompliance by DWC, on November 6, 2008, the DEP reversed its position and issued an order allowing DWC to keep the pits in operation, "so long as they contain only fluids and do not cause objectionable odors off-site."<sup>6</sup> Unfortunately, local residents have continued to report offensive odors to the present time. For instance, an owner of a neighboring property reported this week in a comment letter to DEP that there are still noxious odors at the site. Other residents apparently experienced problems with odors in February of this year.

The May 12, 2008 order also required DWC to sample the fluid in the pits and the stream adjacent to the pits twice annually. While some testing has occurred, it is not clear whether the testing has been performed according to the requirements. The tests taken have been done at irregular intervals, and samples appear to be collected by DWC itself. Sample locations are often imprecise (e.g. "midstream") and some of the testing reports provide no indication of where the samples were taken. However, a number of the tests have shown elevated levels of certain contaminants.

On September 23, 2010, DEP issued another notice of violation to DWC, this time because used oil not associated with produced fluids was observed within the pits. DWC was ordered to replace the pit liners.

## Danny Webb Construction Should Not Be Issued A UIC Permit Due to a History of Repeated Violations:

The Department of Environmental Protection should not issue a UIC permit to Danny Webb Construction because of the operator's pattern of previous violations and non-compliance with DEP orders, as well as current concerns posed by DWC operations. In addition, because the permit for this UIC well expired in 2012, DWC's application should be evaluated as a new application (by an operator with a significant history of violations) rather than as a permit renewal.

Significant concerns related to water quality continue to exist. The stream adjacent to the pits is a tributary of Wolf Creek and the DWC site is in the headwaters of the main stem of Wolf Creek,

<sup>&</sup>lt;sup>5</sup> See West Virginia Department of Environmental Protection, Consent Order No. 2008-6 at 1 (June 16, 2008).

<sup>&</sup>lt;sup>6</sup> See West Virginia Department of Environmental Protection, Consent Order No. 2008-15 at 1 (November 6, 2008).

the source of emergency drinking water for Fayetteville. Wolf Creek is an impaired stream listed on the state's listing of impaired waters under Section 303(d) of the Clean Water Act and the Water Quality Planning and Management Regulations.<sup>7</sup> Among the impairments for which Wolf Creek is listed is a high concentration of iron, a contaminant that appears in high levels in a number of the water samples provided by DWC.<sup>8</sup>

Longstanding reports of contamination in the stream may be related to DWC's operations. While DWC was required to sample the stream twice annually, it is not clear that it has undertaken sampling as often as required. The sampling has not been on a regular schedule, which is important to account for seasonal changes in the stream. In addition, it appears that DWC gathers the samples itself, casting doubt on the credibility of the samples and the methods used to collect them. The location at which samples were collected is not precisely recorded, and does not appear to have been recorded at all for certain samples. DEP should require sampling to be conducted by an independent third-party laboratory using best practices for establishing the location of the sampling (including taking GPS coordinates of sampling locations) and maintaining a secure chain of custody. It is extremely concerning that a number of the water tests show high levels of contaminants, including benzene, a known carcinogen, oil, chloride, and iron, yet the record reveals no evidence that DEP has investigated or taken independent samples since these results were provided.

There is photographic, video, and eye-witness evidence that indicates that contaminants may be seeping out of the sides of the pit berms, leading to the contamination of soil and the creek. Yet there is no evidence that the DEP has ever investigated the reports of seeping pits. A seeping pit with a failed liner is a potential threat to underground sources of drinking water, to the creek itself, and could result in numerous statutory violations.

There are also reports that the stream may have been re-routed, yet there is no evidence that a permit was ever issued for such construction.

The history of this site raises questions about whether DEP has authorized continued activity, potentially putting the public at risk, despite indications that the operator may have regularly

<sup>&</sup>lt;sup>7</sup> See 40 C.F.R. § 130.7.

<sup>&</sup>lt;sup>8</sup> See http://iaspub.epa.gov/tmdl\_waters10/attains\_waterbody.control?p\_au\_id=WVKN-

<sup>10</sup>\_00&p\_cycle=2010&p\_state=WV&p\_report\_type=.

violated the DEP's orders. Unless and until DEP can ensure public safety and full compliance, it should require the site to be fully remediated and permanently closed. There is strong evidence that DEP has turned a blind eye to a flagrant violator and DEP must use this case to reassess its oversight of the UIC program and all oil and gas waste management in the state of West Virginia.

Oil and gas exploration and production (E&P) wastes have been shown to meet the criteria for hazardous waste and to contain toxic substances which endanger both human health and the environment.<sup>9</sup> Despite the fact that these wastes may be dangerous, they are not regulated as hazardous wastes under the Resource Conservation and Recovery Act (RCRA).<sup>10</sup> West Virginia has been delegated authority over all classes of underground injection wells, pursuant to the Safe Drinking Water Act, 42 U.S.C. § 300f *et seq.* However, despite the fact that E&P wastes may be hazardous, the State does not require that they be injected into Class I wells, which are designed with increased safeguards to ensure that the hazardous wastes are safely disposed of. In contrast, the requirements relating to Class II wells are not adequate to protect the public.

The lower standards applicable to Class II wells have proven inadequate to prevent E&P wastes from contaminating groundwater. West Virginia law requires that standards be sufficient to ensure that contaminants may not enter underground sources of drinking water.<sup>11</sup> In 1988, GAO released a report, *Safeguards Are Not Preventing Contamination from Injected Oil and Gas Wells*, which examined the effectiveness of the UIC program.<sup>12</sup> Although GAO speculated that it was likely that more incidents had occurred, it reported that the EPA was aware of at least 23 cases across the country where Class II injection wells had contaminated drinking water supplies.<sup>13</sup> Since then many more incidences of concern have occurred.

In the years that have passed since the GAO report, the risks associated with E&P wastes have expanded dramatically. The advent of technologies like horizontal drilling and hydraulic fracturing have increased the volumes of waste and expanded the numbers of hazardous

 <sup>&</sup>lt;sup>9</sup> See Regulatory Determination for Oil and Gas and Geothermal Exploration, Development and Production Wastes,
53 Fed. Reg. at 25446, 25448 (Jul. 6, 1988).

<sup>&</sup>lt;sup>10</sup> See 42 U.S.C. § 6921(b).

<sup>&</sup>lt;sup>11</sup> See W. Va. Code St. R. § 47-13-13.

<sup>&</sup>lt;sup>12</sup> U.S. GENERAL ACCOUNTING OFFICE, RCED-89-97, SAFEGUARDS ARE NOT PREVENTING CONTAMINATION FROM INJECTED OIL AND GAS WELLS 2 (1989).

 $<sup>^{13}</sup>$  *Id.* at 3.

chemicals that may be present in these wastes. And the expansion of oil and gas operations, including E&P waste disposal wells, into more densely populated areas puts even more people at risk. While West Virginia had 319 Class II wells in 1983,<sup>14</sup> the state currently has 759 such wells.<sup>15</sup>

Given the history of problems at this site and indications that activities associated with the injection wells and the adjacent pits continue to pose environmental and health risks, the DEP must deny the application unless and until it can ensure the public that the site does not pose a hazard. Because of the many concerns raised by members of the public in response to the issuance of the draft permit, we also strongly urge the Department to grant a public hearing on the permit to allow additional time for consideration, take input, and ensure that the public's concerns are addressed before the issuance of any permit.

Respectfully submitted,

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<sup>&</sup>lt;sup>14</sup> *See* West Virginia Department of Natural Resources; Underground Injection Control; Primacy Application, 48 Fed. Reg. 16,079 (Apr. 14, 1983).

<sup>&</sup>lt;sup>15</sup> See U.S. Environmental Protection Agency, Classes and Numbers of Underground Injection Wells, <u>http://www.epa.gov/reg3wapd/uic/wells.htm</u> (accessed February 22, 2013).