OFFICE OF ADJUDICATIONS

IN THE MATTER OF	***:***	***ORDERS SRD-157 and SRD-162***
JOHN and JUNE McCOY	***:***	***SEPTEMBER 9, 2005***

FINAL DECISION

I

SUMMARY

The respondents John and June McCoy have filed timely appeals from orders issued by the Commissioner of the Department of Environmental Protection (DEP) in March and May 2004.[1] The orders require the respondents to investigate soil, surface water and groundwater contamination on or emanating from their property located at 28 Basswood Drive, North Branford. General Statutes §22a-432.

The parties to these proceedings are the DEP Bureau of Waste Management and the respondents. Hearings were held on six days between November 15, 2004 and March 23, 2005. Post-hearing briefs and reply briefs were submitted on May 27, 2005 and June 8, 2005 respectively.

The evidence demonstrates that the respondents are maintaining a condition that can reasonably be expected to create a source of pollution to the waters of the state. §22a-432. The evidence also shows that issuance of the orders was appropriate under the circumstances. The requirements of the orders are necessary to protect the waters of the state from a potentially polluting condition. The orders are therefore *affirmed.*

[1] These appeals were consolidated on August 8, 2004. Regs., Conn. State Agencies §22a-3a-6(d)(2)(G).

II
DECISION

A

FINDINGS OF FACT

1. John and June McCoy are the owners of real property located at 28 Basswood Drive, North Branford. The property lies to the north, upgradient and abutting 14 Basswood Drive, which is owned by Thomas Ferrigno. (Exs. DEP- 26, 34; test. 3/22/05, F. Bartolomeo)

2. On May 8, 2000, staff from the DEP Oil and Chemical Spill Response Division responded to an emergency report of fuel oil odor emanating from the Ferrigno bedrock drinking water well.[2] Staff investigated Ferrigno's drinking water, which was cloudy with an apparent red tint characteristic of the red dye used in home heating oil. (Exs. DEP-1, 2; test. 11/15/04, J. Aceto.)

3. Following this initial emergency response, DEP staff began preliminary investigation procedures commonly used to determine the source of a heating fuel release. Such procedures include an examination of the heating fuel in the bedrock well; an evaluation of other wells that may be impacted by the release; a review of the topography of the area; an inventory of residences with heating fuel components underground or recently underground; fuel transfer line or tank tests on the underground components; and subsurface testing at potential sources. (Ex. DEP-12; test. 11/18/04, F. Bartolomeo.)

4. Approximately four feet, or six gallons of oil was found on the water surface of the Ferrigno well. The oil was clear, had not weathered or degraded, and contained the majority of its red dye, which indicated that the oil had little contact with soil and water and that the source of the oil was nearby. A comparative or fingerprint analysis of a sample revealed an "unidentified petroleum product in the range of diesel/#2 fuel oil." The results of subsequent gas chromatography/mass spectrometry analyses of the well water indicated the presence of a

[2] The order lists this property address as 14 Basswood Drive, but omits reference to the town in which this property is located. Throughout these proceedings, it was clear that the respondents were aware of the location of 14 Basswood Drive. Respondents have not demonstrated any prejudice as a result of this omission in the orders.

number of volatile organic compounds (VOCs) characteristic of fuel oil. (Exs. DEP-2, 5, 6, 11; test. 11/15/04, J. Aceto, S. Wing; test. 11/27/04, F. Bartolomeo.)

5. Staff inspected numerous borings in the basement floor that had been drilled by Ferrigno prior to the DEP emergency response site visit. The borings exposed the oil transfer line, which was not under the basement floor but in a groove in the cement and capped by concrete. Staff observed that there was no fuel odor coming from the holes, and no staining or wicking on the concrete. The results of a fuel transfer line test indicated that the line was tight and did not leak. (Exs. DEP-12, 14; test. 11/18/04, F. Bartolomeo.)

6. Prior to staff's investigation, Triton Environmental had conducted an informal soil gas screening[3] in the basement borings as a courtesy to Mr. Ferrigno. A Photo Ionization Detector (PID)[4] was used to screen vapors within the holes drilled by Ferrigno. The PID readings did not indicate the presence of petroleum hydrocarbons under the basement floor and no odors were detected from the boring holes. Soil cuttings generated during the drilling did not exhibit any noticeable odors or elevated readings when screened with the PID. (Exs. DEP- 12, 14, 31; test. 11/18/04, F. Bartolomeo.)

7. Following its first site visit, staff identified three properties, including the respondents', located upgradient of the Ferrigno well with outside pipes or other indications of an underground or above ground fuel oil tank or underground fuel transfer lines.[5] On May 16, 2000, staff received permission from all the property owners, including the respondents, to return to conduct preliminary soil gas screenings to determine the source of the fuel oil release. (Exs. DEP-2, 4, 25, 34; test. 11/15/04, J. Aceto; test. 11/16/04, D. Poynton; test. 11/27/04, F. Bartolomeo.)

[3] Air spaces between soil particles are screened or analyzed for volatile compounds. (Test. 11/27/04, F. Bartolomeo.)

[4] A Photo Ionization Detector is a screening tool, used to detect VOCs in soil gas and will respond to heating fuel even at low levels. PID readings indicate the presence of volatile organic gases but not the type. (Test. 11/17/04, 3/22/05, Bartolomeo.)

8. On May 19, 2000, staff took soil gas readings from borings staff had drilled in the basement of each of the three residences. Two or four borings were dug in each location depending on the length of the underground fuel oil transfer line and the extent to which the areas were accessible by a jackhammer. Borings were placed in areas where a spill is likely, near the oil tank and the furnace in the vicinity of the underground transfer line.[6] PID readings were taken at each boring. Moderate level readings for hydrocarbons were detected in two of the four borings at the McCoy residence. All other sample results were non-detect. (Exs. DEP-3, 25, test. 11/15/04, J. Aceto; test. 11/17/04, F. Bartolomeo.)

9. Staff sampled four borings in the basement of the McCoy residence in the presence of the respondents. PID readings in a twelve-inch boring located near the fuel oil storage tank and an eight-inch boring midway between the tank and the furnace were non-detect and no fuel odors were observed from the holes. A PID reading of eleven I.U.[7] was obtained from a twelve-inch boring near the connection from the fuel transfer line to the furnace. Staff also observed a slight heating fuel odor emanating from the hole. An eight-inch boring near the furnace produced a PID reading of sixteen I.U. After redrilling the hole to a depth of eighteen inches, staff obtained a PID reading of twenty-eight I.U. and detected a slightly higher heating fuel odor emanating from the hole. (Exs. DEP-3, 4, 12; test. 11/16/04, D. Poynton; test. 11/18/04, F. Bartolomeo.)

10. Soil cuttings from the borings were not analyzed as part of staff's investigation. Staff declined the respondents' offer of plastic bags to transport the soil cuttings for testing. Shortly after the investigation, the respondents had the underground fuel transfer line capped and a new line installed aboveground. A subsequent test of the underground line indicated that the line was tight and not leaking. (Ex. DEP-2; test. 11/15/04, J. Aceto; test. 11/15/04, D. Poynton; test. 3/23/05, J. McCoy.)

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[5] The three properties include 28 Basswood (McCoy), 36 Basswood (Manzi), and 42 Basswood (Gerwien). (Ex. DEP-3, Test. 11/15/04, J. Aceto.)

[6] Leaks that occur from fuel transfer lines occur near the furnace where corrosion of the pipes is likely to occur particularly with copper pipe running up through the concrete floor. (Test. 11/18/04, F. Bartolomeo.)

[7] PID readings are expressed in terms of instrument units (I.U.) Elevated readings indicate the need for further investigation, specifically, an I.U. of greater than ten is considered a positive result for VOCs. (Test. 11/17/04, 3/22/05, F. Bartolomeo.)

11. Two additional residences were identified as potential sources of the heating fuel release. On June 6, 2000, staff inspected 31 Basswood Drive, which is located northeast of the Ferrigno well and which had received 436 gallons of heating oil from February 28 to May 8, 2000. Staff identified a fuel transfer line that was partially capped with cement. One boring was drilled in the basement floor; PID readings were non-detect. No odors were detected in the area of a sump located near the above-ground fuel oil storage tank, and a tap-water analysis showed no evidence of fuel oil contamination. (Exs. DEP-4, 12; test. 11/16/04, D. Poynton.)

12. The heating system was inspected at 275 Sea Hill Road, which is located northwest of the Ferrigno well. A fuel transfer line test showed the line was tight. A well water sample analyzed for volatile compounds exhibited five heating oil compounds at less than five parts per billion. The results of an analysis of a second sample were non-detect for heating fuel compounds. (Exs. DEP-8, 9, 12, 15; test. 11/18/04, F. Bartolomeo.)

13. Ferrigno received 532 gallons of heating oil from January through May 2000 and supplemented his heating by burning wood. The McCoy household had eight deliveries totaling 1250 gallons; 300 gallons were apparently delivered in May. An analysis of the McCoy's annual oil usage in terms of degree days/gallons used indicated that at least 100 gallons of oil are unaccounted for during the May 2000 time period.[8] (Exs. DEP-2, 23, 26; ex. McCoy - 31; test. 11/18/04, F. Bartolomeo.)

14. On October 16, 2000, staff drilled borings to install two temporary micro monitoring wells on the Ferrigno property and one at 36 Basswood Drive to determine area soil elevations, the presence of groundwater and groundwater quality. In all three instances, groundwater was not present and no heating fuel odor was detected. (Ex. DEP-16; test. 11/17/04, T. Baird.)

[8] The source of the delivery information for Ferrigno and for 31 Basswood Drive is unknown. Staff relied on a computer printout provided by the fuel oil supplier with hand-written notations of the quantities delivered to the McCoy household during the year. On its face, the document is unreliable. However, the respondents did not rebut the quantity of fuel purchased as shown in the printout. The evidence is therefore relevant to the extent it constitutes another factor in the Department's decision to issue the orders that are the subject of these proceedings.

15. The bedrock in the area is classified as part of the East Berlin Formation as determined by topographic maps and visual observations of outcroppings in the vicinity of the Ferrigno and McCoy properties. The reddish-brown shale allows contamination to flow easily along the bedrock layers and with the slope of the land. A steeply sloping hill lies to the north of the Ferrigno and McCoy properties and becomes steeper to the south of the McCoy property. Groundwater would therefore be more inclined to flow in the north-south direction. The ground surface layer of overburden of bedrock is thin in the area so the oil would not get absorbed into the soil. A release at the McCoy residence or south of the residence would immediately impact the bedrock and the aquifer. (Exs. DEP-25, 36; test. 3/22/05, F.Bartolomeo.)

16. Two incidents of fuel oil releases that occurred approximately 1800 to 2000 feet northwest of Basswood Drive on Whispering Hill Drive were under investigation by DEP staff at the time of the Ferrigno investigation. However, private wells in the Whispering Hill Drive area located between the source of the fuel oil and Basswood Drive had not been impacted by these releases. Also, fuel oil does not typically travel distances of more than a half-mile. Therefore, the releases were not considered in the McCoy or Ferrigno investigations. (Ex. McCoy-23; test. 3/22/05, F. Bartolomeo.)

17. Staff concluded that it is likely that the source of the fuel oil was north of the Ferrigno well. Since the Ferrigno house is directly north of the contaminated well, an underground fuel line test was conducted. This showed no leak; there were no elevated PID readings from the borings around the line and no apparent indications of abnormal oil consumption. The Ferrigno oil line was eliminated as a possible source of the contamination. The McCoy residence is the next property directly north of the Ferrigno property. (Ex. DEP-25; test. 3/22/05, F. Bartolomeo.)

18. Following the initial investigation of the McCoy property, the respondents notified staff that they would not be permitted access to the property to conduct further subsurface investigations. In a June 22, 2000 letter, staff informed the respondents of the investigation process and the preliminary findings of their initial investigation. Staff repeatedly requested access to the site and recommended that the respondents retain an environmental consultant to conduct an investigation. Staff also informed the respondents of the possibility of reimbursement for

remediation expenses from the Residential Underground Storage Tank Amnesty Program. (Exs. DEP-2, 12, 26-29.)

19. The respondents made frequent requests to staff for additional information regarding the status of the Ferrigno well contamination and persisted in their position that there was no release on their property that would have caused the well contamination. The respondents did not conduct any additional investigation or permit staff to access their property to do so. The Commissioner issued orders to John and June McCoy on March 7, 2004 and June 21, 2004, respectively. (Exs. DEP-2, 12, 26 -29; exs. McCoy-1-3, 8; test. 3/23/05, J. McCoy.)

20. It is likely that contamination still exists on the McCoy property. To definitively determine the status of any contamination, it is necessary to test for total petroleum hydrocarbons and for volatile compounds using as many soil cores as necessary. (Test. 3/22/05, F. Bartolomeo.)

II

CONCLUSIONS OF LAW

The Commissioner has been given broad powers to carry out the environmental policies of the state set forth in the statutory provisions commonly referred to as the Connecticut Water Pollution Control Act (Act). General Statutes §§22a-416 through 22a-527. Specifically, §22a-422 provides that "the pollution of the waters of the state is inimical to the public health, safety and welfare of the inhabitants of the state, is a public nuisance and is harmful to wildlife, fish and aquatic life and impairs domestic, agricultural, industrial, recreational and other legitimate beneficial uses of water…and the necessity and public interest for the enactment of this chapter and the elimination of pollution is hereby declared as a matter of legislative determination." The Act empowers the Commissioner to issue orders that require remedial measures necessary to prevent, control or abate pollution. §22a-424.

The orders that are the subject of this appeal were issued pursuant to §22a-432 of the Act, which authorizes the Commissioner to issue an order to any person to take necessary measures to correct a potential source of pollution when the Commissioner finds that such person has created

or is maintaining any condition that can reasonably be expected to create a source of pollution to the waters of the state. The orders require the respondents to investigate and remediate groundwater, surface water and soil pollution that is on or emanating from their property. As used in the Act, pollution means "harmful thermal effect or the contamination or rendering unclean or impure or prejudicial to public health of any waters of the state by reason of any wastes or other material discharged or deposited therein by any public or private sewer or otherwise so as directly or indirectly to come in contact with any waters…." §22a-423.

To support the orders on appeal, the DEP must prove by a preponderance of the evidence the factual issues in controversy. Regs., Conn. State Agencies §22a-3a-6(f). A preponderance of the evidence means the "greater weight of the evidence; superior evidentiary weight that, though not sufficient to free the mind wholly from all reasonable doubt, is still sufficient to incline a fair and impartial mind to one side of the issue rather than the other." Black's Law Dictionary (7th Ed. 1999).

The respondents argue that the Department has not met its burden of proof. The respondents claim that the investigation into the source of the pollution in the Ferrigno well was incomplete and inconsistent. The respondents also argue that the Department's continued requests for access to conduct additional testing on their property were not authorized by an administrative search warrant, which they claim is evidence that the Department engaged in selective enforcement.[9]

The respondents' claims of insufficient or inconsistent investigative procedures and selective enforcement are only relevant to the issue of determining the source of the Ferrigno well contamination. It is evident from the record that the purpose of staff's investigation was to locate the source of the fuel oil release that caused the contamination of the Ferrigno well. However, the adequacy of that investigation is not at issue here. It is not necessary that I find the cause of pollution at another site to uphold an order issued under §22a-432. The Department need only show the existence of a potentially polluting condition claimed in the orders and that

[9] A violation of equal protection which occurs when a person, compared with others similarly situated, was selectively treated; and such treatment was based on impermissible considerations such as the intent to inhibit or punish the exercise of constitutional rights, or a malicious or bad faith intent to injure a person. *Cadlerock Properties J.V., L.P. v. Commissioner of Environmental Protection*, 253 Conn. 661, 671 (2000).

the respondents have created and/or are maintaining said condition. Therefore, what is at issue is whether, in the course of the investigation, staff identified a condition at the McCoy residence that warranted issuance of the orders that are the subject of these proceedings.

The record demonstrates that the Department has sustained its burden of proving the factual allegations contained in the orders in support of the claim that a condition exists on the McCoy property that can reasonably be expected to create a source of pollution. The record shows that the condition of the Ferrigno bedrock drinking water well justified staff's investigation of surrounding properties. Elevated PID readings were detected at the respondents' home at sufficiently high levels indicating the need for further investigation of the subsurface. While at the respondents' home, staff detected the odor of fuel oil. Other potential upgradient sources of heating fuel were not detected or too far away to have impacted the McCoy property, and the respondents' underground fuel oil transfer line and all other lines were found to be tight and not leaking. The conflicting results from the transfer line and soil gas tests combined with the fuel oil odors detected at the site were sufficient to warrant further subsurface investigation at the respondents' residence, however, the respondents denied staff the opportunity to conduct a more thorough investigation at 28 Basswood Drive and also refused to conduct any further investigation on their own.

It is reasonable to conclude that the presence of VOCs in the subsurface at the levels detected during the preliminary investigation of the McCoy property indicate that a condition exists such that pollution of the groundwater has occurred or is likely to occur, even though it may not exist or occur to the degree that the remediation regulations have been violated. See *Alcoa Composites, Inc. v. Connecticut Department of Environmental Protection et al.*, 2002 Conn. Super. LEXIS 1517 (Conn. Super. Ct. April 29, 2002) (Commissioner may order abatement based on pollution as defined by statute, even though pollution does not reach remediation levels under regulations). In addition, the respondents have been made aware of the existence of the VOCs on their property and of the potential for a fuel oil release to the subsurface and have not taken any further action to determine the extent or degree of pollution that exists on their property.

It is well settled that environmental statutes are considered remedial in nature and are to be construed liberally in order to accomplish the legislature's intent. The Commissioner has been given broad powers under the Water Pollution Control Act to issue orders to address potential pollution and to achieve the purposes of the Act. *Starr v. Commissioner of Environmental Protection et al.*, 226 Conn. 358, 382 (1993). It is therefore essential that the Commissioner issue an order in those circumstances where indicators warrant further investigation of a potentially polluting condition and such investigation is denied, as well as those instances where there is definitive proof such a condition exists.

The greater weight of the evidence supports a conclusion that the respondents own property on which there exists a condition that reasonably can be expected to create a source of pollution to the water of the state and that respondents were made aware of such condition. The evidence also shows that, having been made aware, the respondents continue to maintain such condition. Given the Commissioner's responsibility to protect the waters of the state, issuance of the orders was necessary to force further investigation of the potentially polluting condition and remediation.

III

CONCLUSION

The Department has sustained its burden of proving that the respondents are maintaining a condition that can reasonably be expected to create a source of pollution of the waters of the state and that issuance of the orders was appropriate under the circumstances. The record supports a conclusion that the measures ordered are necessary to protect the waters of the state from a potentially polluting condition. §22a-432

Orders SRD-157 and SRD-162 are *affirmed*. All deadlines set forth in the orders that run from the date of issuance shall instead run from the date of this decision.

_Sept. 9, 2005_____ /s/ Jean F. Dellamarggio_____
Date Jean F. Dellamarggio, Hearing Officer

cc: Gabrielle Frigon, DEP Waste Mgmt. Bureau
Jason L. McCoy, Esq.