

RICHARD S. & CATHY L. MADDOCK
(ON RECONSIDERATION)

IBLA 2004-105R

Decided March 30, 2006

Decision on reconsideration of that part of the Board's order, dated April 26, 2005, in IBLA 2004-105, reversing a decision of the Regional Director, Appalachian Regional Coordinating Center, Office of Surface Mining Reclamation and Enforcement (OSM), on informal review of a determination that the Pennsylvania Department of Environmental Protection took appropriate action in response to OSM's Ten-Day Notice. TDN No. X02-121-148-002.

Board order reaffirmed on reconsideration; OSM decision reversed and case remanded for inspection.

1. Surface Mining Control and Reclamation Act of 1977--
Generally

Pursuant to OSM's oversight authority in states with approved programs having primary enforcement jurisdiction, OSM is required to conduct an inspection when it has reason to believe that a violation of the state program exists, it has given the state regulatory authority notice of the possible violation, and the state has failed to take appropriate action within 10 days to cause the violation to be corrected or show good cause for such failure. On review of a state regulatory agency's response to a ten-day notice asserting that it has good cause under 30 CFR 842.11(b)(1)(ii)(B)(4)(i) in that the asserted violation does not exist, the standard of review applied by OSM is whether that ruling is arbitrary, capricious, or an abuse of discretion.

APPEARANCES: Richard S. and Cathy L. Maddock, pro sese; Thomas C. Reed, Esq., Pittsburgh, Pennsylvania, for intervenor Consolidation Coal Company; Steven C. Barclay, Esq., Office of the Solicitor, U.S. Department of the Interior, Pittsburgh, Pennsylvania, for the Office of Surface Mining Reclamation and Enforcement.

OPINION BY ADMINISTRATIVE JUDGE GRANT

On April 26, 2005, the Board issued an order deciding two consolidated appeals filed by Richard S. Maddock and Cathy L. Maddock. The first appeal (docketed as IBLA 2001-252) was from a decision of the Regional Director, Appalachian Regional Coordinating Center (ARCC), Office of Surface Mining Reclamation and Enforcement (OSM), on informal review of a Harrisburg Field Office (HAFO) determination that the Pennsylvania Department of Environmental Protection (PADEP) took appropriate action in response to OSM's Ten-Day Notice (TDN) No. X99-121-273-001. OSM issued the TDN in response to a citizen complaint filed by the Maddocks alleging that Consolidation Coal Company (Consol) had diminished their well water when drilling a borehole (borehole #10) at the Renton Refuse Pile (Coal Refuse Permit No. 02733702) in Allegheny County, Pennsylvania.

The second appeal (IBLA 2004-105) was from a May 16, 2003, decision of the Regional Director, ARCC, on informal review of a determination by HAFO that PADEP took appropriate action in response to TDN No. X02-121-148-002. OSM issued that TDN in response to the Maddocks' citizen complaint alleging that the recently restored water from their well exhibited levels of sulfate exceeding the Environmental Protection Agency standards for drinking water, had a sour smell, and caused visible rust stains on porcelain plumbing fixtures in their house.

In our April 26, 2005, order, we affirmed the OSM decision in IBLA 2001-252, and reversed the decision in IBLA 2004-105. The consequence of the reversal in the latter case was to require OSM to conduct a Federal inspection. (Apr. 26, 2005, Order at 41.) On July 5, 2005, OSM filed a Motion for Reconsideration of our order to the extent it adjudicated IBLA No. 2004-105.^{1/} In its motion, OSM pointed out that under the regulation at 43 CFR 4.1109(a)(1) appellants were required to serve a copy of their appeal on any statutory parties specified in the regulation at 43 CFR 4.1105. OSM also noted that under 43 CFR 4.1105(a)(5), statutory parties to appeals to the Board from decisions of OSM on informal review under

^{1/} No motion for reconsideration has been filed with respect to our order in IBLA 2001-252.

30 CFR 842.15(d) ^{2/} include “the permittee of the operation that is the subject of the determination.” Counsel for OSM note that after the Board’s April 26, 2005, order, Consol filed a suit in the Federal district court contending that the Board violated Consol’s rights under the appeal regulations by adjudicating the Maddocks’ appeals without affording Consol any opportunity to appear and participate in these appeals before the Board. In its complaint in this case Consol stated that it received no notice of the Maddocks’ appeals to the Board and the case was adjudicated without its knowledge or participation. Proceedings in this litigation were stayed by order of the court pending reconsideration by the Board of its order in IBLA 2004-105.

Consolidated Coal Company v. U.S. Department of the Interior, Richard Maddock and Cathy Maddock, No. 05-0731 (W.D. Pa. July 20, 2005).

In our decision, cited as Richard S. & Cathy L. Maddock (On Reconsideration), 167 IBLA 200 (2005), we granted the motion for reconsideration. We found that under the 1994 regulatory revision, the permittee is a statutory party to a review of a decision not to conduct an inspection by the Director, OSM, on informal review under 30 CFR 842.15(d). 43 CFR 4.1105(a)(5). Accordingly, we set aside our order of April 26, 2005, as it pertained to IBLA 2004-105, reinstated the Maddocks’ appeal, and established a briefing schedule. A brief has now been filed by Consol. A reply has been filed by the Maddocks. OSM has not filed a brief. Consequently, the case is now ripe for review on reconsideration.

In reviewing OSM’s decision in this case, the question on appeal is whether the Regional Director, ARCC, properly concurred in HAFO’s decision that the PADEP showed good cause for not taking enforcement action in response to the alleged violation. In our order remanding this case to OSM, we stated that:

In deciding whether the State took appropriate action or demonstrated good cause for not taking enforcement action, the State’s conduct will be judged by OSM, in its oversight role, not by what OSM would have done in the circumstances, but by whether the State acted arbitrarily or capriciously or abused its discretion under the State surface mining program law in its actions in response to the TDN.
30 CFR 842.11(b)(1)(ii)(B)(2) * * *.

(Order of Apr. 26, 2005, at 3, quoting Jim & Ann Tatum, 151 IBLA 286, 298 (2000).) In particular, we noted that the key issue is whether OSM properly found that good cause was shown by PADEP’s response to the TDN in that no violation existed because “neither the borehole, the refuse pile, nor the underground mine was the

^{2/} These appeals were filed pursuant to the appeal regulations at 43 CFR 4.1280 through 4.1286.

source of the elevated sulfate levels in the Maddocks' well water." (Order of Apr. 26, 2005, at 36.) We observed that it appeared that PADEP had effectively shifted the burden of proof under Pennsylvania law regarding the source of the Maddocks' well water contamination from the operator to the Maddocks. Id. at 38. "Without an explanation as to why the drilling of the borehole could not have impacted the hydrology surrounding the Maddocks['] well so as to render it susceptible for the first time to other contamination," we were unable to find that the record established "good cause" for PADEP to relieve Consol of the requirement to reconnect the Maddocks to a quality water supply. Id. at 40.

In Consol's brief, it contends that PADEP did not impose the burden of proof on the Maddocks to show that Consol had violated the regulations, but rather required Consol to demonstrate that its actions were not the cause of the water problems with the Maddocks' well.^{3/} (Brief at 3.) Consol argues that after 12 months of sampling the Maddocks' water well from June 2000 through June 2001, each of the samples taken after the well was pumped down to simulate normal usage consistently met all non-bacterial safe drinking water criteria, reflecting low iron levels and sulfate levels below 250 mg/l, with one exception which was unrelated to mining factors. Id. at 7, 12. Consol asserts that it was only after almost three years of investigation and analysis of the water quality in the Maddocks' well and the surface and groundwater features of the Renton Mine complex that PADEP found that Consol had "demonstrated to its satisfaction that nothing Consol did, or was doing, at Renton was having any adverse affect on the quality of the Maddocks' water supply." Id. at 10. Further, Consol contends it was neither required to obtain a permit before drilling exploratory borehole #10 nor to sample the Maddocks' water supply in advance. Id. at 6 n.7. Consol challenges the Maddocks' assertion that prior to the drilling of the borehole their well water was pristine, arguing this assertion does not establish that the well water never previously contained sulfate levels above the regulatory limits. Id. at 10 n.11.

In support of the PADEP finding, Consol notes that the bottom elevation of the Maddocks' well is more than 400 feet above the elevation of the Renton Mine pool, precluding an impact of the mine pool on the well water. Id. at 10-11. Consol states that the casing and grouting which was completed on borehole #10 prevents the surface runoff which is being routed back into the mine pool from communicating with the source of the Maddocks' well water. Id. at 11. Also cited by Consol in

^{3/} Consol acknowledges that in the several appeals of PADEP's actions to the State regulatory appeals board, the Environmental Hearings Board (EHB), the Maddocks assumed the burden, as appellants, of showing error on the issues raised in those appeals. (Brief at 3 n.3, 5 n.5.) Consol insists that PADEP, on the other hand, did not impose any such burden on the Maddocks. Id.

support of the PADEP conclusion is the finding that, based upon the elevation of the water in the bottom of the well and the elevation of the streambed of Plum Creek located between the refuse pile and the Maddocks' well, the stream acts as a barrier to any hydrologic connection between the refuse pile and the well. Id. at 11-12. Consol contends that neither PADEP nor OSM was required to "accept" the conclusion of the Maddocks' consultant regarding a hydrologic connection between the Renton Mine and the Maddocks' water source. Id. at 14.

In a responsive brief filed by appellants, the Maddocks assert that PADEP has never "scientifically investigated the source of the [contaminants.]" (Response at 4.) In support, they cite a February 21, 2003, OSM memorandum indicating that the reports of the hydrologic investigation do not provide an explanation of the elevated sulfate levels in the Maddocks' well water. Id. Appellants dispute Consol's challenge to the prior quality of their well water, asserting that this would not be an issue if Consol had evaluated the water in the Maddocks' well prior to drilling the borehole. Id. at 7-8. Appellants also contend that the PADEP response to the TDN did not explain why the drilling of borehole #10 could not have impacted their water supply. Id. at 9.

The factual background of this case is set forth in considerable detail in our prior Order of April 26, 2005. Consol is the operator under permit No. 02733702 of a coal refuse disposal site (associated with the now-closed Renton Mine) in Allegheny County, Pennsylvania. The operator is under a reclamation requirement to collect and treat seeps of acid mine drainage emanating from the refuse site by collecting the drainage in collection ditches and conveying it through a series of boreholes into an underground pool in the Renton Mine and subsequently pumping the drainage to surface facilities for treatment prior to release into the State's waters. Consol began drilling borehole #10 on July 6, 1998, and completed it on July 17. The Maddocks' water well went dry on July 16, 1998. (Feb. 16, 1999, Memorandum of John D. Kernic, Hydrogeologist, PADEP.)^{4/} The Maddocks' house and water well are situated on the other side of Plum Creek from Consol's Renton Refuse Disposal Area Permit. Id. at 1; see Ex. 6.2, Resource Map. Although the Maddocks' water well is located less than 1000 feet from the borehole, Consol failed to conduct a pre-mining survey of the water well and, hence, there is no way of knowing if the well has recovered to pre-mining conditions with respect to the quality of the water. Id. at 2.

This case commenced with the filing of a citizen complaint dated November 20, 2002, with OSM asserting that, since water from the well had been reintroduced into their house, the quality of the water from the Maddocks' well failed

^{4/} This document is part of the record in IBLA 2001-252, a case which was formerly consolidated with IBLA 2004-105.

to meet the regulatory standard with respect to sulfate content, caused rust stains on their porcelain plumbing fixtures, and created a sour smell. (Administrative Record (AR), ^{5/} Vol. I, at 1-3.) Attached to the complaint were analyses of water samples by Vapco Engineering and Microbac Laboratories on December 26, 2001, and January 17, February 26, and July 24, 2002, showing in each case sulfate levels and, in one case, iron levels in excess of the respective regulatory limits (Maximum Contaminant Level or MCL) of 250 mg/l (sulfate) and 0.3 mg/l (iron). *Id.* at 4-6, 8-10. Analyses by Vapco showed sulfate and iron levels, respectively, of 406.5 mg/l and 0.22 mg/l (Dec. 26) and of 305.2 mg/l and 1.20 mg/l (Jan. 17). *Id.* at 5-6. Samples analyzed by Microbac showed sulfate and iron content, respectively of 413 mg/l and 0.19 mg/l (Dec. 26), 399 mg/l and 0.23 mg/l (Feb. 26), and 443 mg/l and 0.01 mg/l (July 24). *Id.* at 8-10. A TDN (No. X02-121-148-002) was issued by OSM to the State on December 4, 2002.

By letter of December 20, 2002, PADEP responded to the TDN indicating that it had investigated the loss of water supply in the Maddocks' well resulting from the drilling of borehole #10 and concluded in May 2000 that the quantity of the water in the well had been restored after Consol cased and grouted the borehole and that the quality of the water supply had not been affected by the drilling of the borehole. (AR, Vol. 1, at 17-19.) PADEP noted that the EHB found in a decision in January 2002 that there was no evidence that Consol's activities had impacted the quality of the well water. Attached to the PADEP response was a copy of a May 30, 2000, memorandum from hydrogeologist Kernic. Therein, Kernic explained that, after the Maddocks' well had been dewatered by the drilling of borehole #10, Consol was required by 25 Pa. Code § 87.119 ^{6/} to restore or replace that water supply so that it was adequate in both quantity and quality. ^{7/} (AR, Vol. I at 20.) In order to test for quantity, Moody & Associates, on behalf of Consol, conducted a Peak Demand

^{5/} Consol has created a bound copy of documents in the administrative record including three volumes in one ring binder with each volume separately paginated.

^{6/} The TDN itself cited 25 Pa. Code § 89.145(b), a provision which was deleted from the code in June 1998. 28 Pa. Bull. 2761, 2765 (June 13, 1998).

^{7/} This regulation establishes, among other things, the obligation of the operator regarding disrupted water supplies:

“(a) *Water supply replacement obligations.* The operator of any mine or a person in government-financed reclamation who affects a water supply by contamination, pollution, diminution or interruption shall restore or replace the affected water supply with an alternate source, adequate in water quantity and water quality, for the purpose served by the water supply.”

Test (PDT) on January 18, 2000.^{8/} Qualitative tests were also conducted on water samples taken during the PDT. Kernic explained that the well passed the PDT by yielding 600 gallons of water over a 4-hour period. He stated: “Based on the results of the PDT, it is the Department’s conclusion that the well is adequate to meet the Maddocks’ [quantitative] needs.” Id. at 24.

Kernic explained that, in order to determine the Maddocks’ water usage, he consulted records from Dean’s Water Service, which had supplied the Maddocks with water after the dewatering of their well, as well as an Environmental Protection Agency (EPA) Manual on water usage. Id. at 23; AR, Vol. III at 91-92. He stated that the Maddocks’ well generally supplies a family of four (the Maddocks and their two children). He noted, however, that Mrs. Maddock has operated a day-care center in her home for as many as six children, but that she had informed PADEP that she had a license for up to 12 children. Therefore, the Department calculated water needs for 4 residents and 12 clients. He stated that the EPA Manual states that a resident of a single family dwelling uses between 50 to 75 gallons per day (gpd), indicating that the Maddocks should use between 200 and 300 gpd. The same manual projected average daily water usage for day schools with a cafeteria, but no gym or showers, to be approximately 20 gpd per pupil or 240 gpd. Consulting the Dean Water Service records for two separate periods in 1998 and 1999, the Department found the highest weighted daily average water usage was 349 gpd for the second period April 7, 1999, through December 14, 1999, while the weighted daily average water usage for an earlier period from July 22, 1998, to April 7, 1999, was 259 gpd. Kernic speculated that the increased usage may have been due to operation of the day-care business or that there was severe drought in 1999. In any event, Kernic concluded that “[i]f the Maddocks use an average of 350 gallons of water per day and the 12 pupils use an average of 240 gpd, then the average water usage combined is approximately 590 gallons per day.” (AR, Vol. I at 23.) Therefore, the PDT was calculated to reflect the maximum demand on the well.

^{8/} The method of testing the well used on Jan. 18, 2000, identified in Kernic’s May 30 Memorandum as a PDT, was described in a letter of Feb. 21, 2000, from Moody and Associates, Inc., to Consol:

“The well was pumped at a rate of five gallons a minute[] for 15 minutes at which time the pump was shut off and the well was allowed to rest for 15 minutes. After resting for 15 minutes the well was pumped at five gpm for 15 minutes. The cycle of pumping and resting was repeated eight times until a total of 600 gallons was pumped from the well. At the conclusion of the pump test, water samples were collected * * *. (AR, Vol. I at 50.)

It appears from Table 1 of the Moody report that the seventh pumping cycle was actually the last. Id. at 55.

Regarding quality, Kernic stated that in the absence of pre-mining background data, the PADEP determines whether the water supply has been restored “based on the Pennsylvania Safe Drinking Water Standards for bacteria and the parameters most commonly associated with mine drainage – pH, alkalinity, acidity, iron, manganese, aluminum, sulfate and total suspended solids.” (AR, Vol. I at 21.) Kernic concluded, based on analyses of five water samples taken from September 1998 through January 18, 2000, that water from Maddocks’ well met the Pennsylvania Safe Drinking Water Standards, except for bacteria, for which, in accordance with Pa. Code § 87.119(b)(2), Consol was not responsible. He noted that on a few occasions iron and sulfate concentrations were elevated, but that such exceedances were by less than 10 percent, which was “within the acceptable range of error for the Department’s Harrisburg lab and other EPA certified labs (+/- 10% is the acceptable range of error).” (AR, Vol. 1 at 21.) Nevertheless, he stated that PADEP “recommended that Consolidation Coal Company sample the well water once a month for a minimum of one year to monitor the water quality of the well.” (AR, Vol. I at 22.)

Under the terms of the renewal of the Consol permit on June 13, 2000, Consol was required to sample the Maddocks’ well once a month for one year. (AR, Vol. III at 4, ¶¶ 18, 19.) Consol collected and analyzed water samples from the Maddocks’ well on July 24, August 24, September 29, October 27, November 27, and December 29, 2000, and on January 26, February 23, March 28, April 25, May 30, and June 27, 2001. *See* Maddocks’ Response to Statement of Reasons (responding to BLM’s Answer), Ex. 13 (summary of analytic results of well tests from 7/24/00 through 6/27/01), AR, Vol. II at 105. The analysis indicated that sulfate levels in the initial samples taken on test days exceeded the 250 mg/l MCL for sulfate on May 30, 2001 (270 mg/l), and on June 27, 2001 (280 mg/l), and that sulfate levels in the second samples taken exceeded the MCL on August 24, 2000 (280 mg/l), November 27, 2000 (300 mg/l), and June 27, 2001 (290 mg/l). *Id.*^{2/}

In a followup memorandum dated June 7, 2001, Kernic stated that prior to December 2000, excluding the July 2000 samples which were deemed unrepresentative because this was when the well was first tested after being idle for many months, “the sulfate concentration exceeded the recommended drinking water standard twice (Aug. and Nov. 2000).” *Id.* at 59. He discounted the excess readings as due to differences in analytical procedures between the laboratories. *Id.* Kernic indicated that Consol sampled the wells twice on each date, once when the pump was first turned on and again after the well was purged. *Id.* Samples collected prior to

^{2/} These results refute Consol’s assertion on appeal that, from June 2000 through June 2001, the second set of samples met the non-bacterial regulatory standard for drinking water.

purging were not considered to be representative samples. Id. Kernic stated that since December 2000 the water quality measured in the second sample had consistently met the water quality standard.^{10/} Id.; see AR Vol. II at 105 (Ex. 13 to Maddocks' Response to Statement of Reasons).

After receipt of the PADEP response to the TDN, OSM requested a further explanation from PADEP pointing out the Maddocks had offered the results of further sampling that showed sulfate concentrations significantly in excess of the standard on several occasions, suggesting "that the elevated sulfate levels are increasing in frequency and also exceeding the Pennsylvania Safe Drinking water standards by higher levels." (AR, Vol. I at 83.) The supplemental response to the TDN came in the form of a new memorandum dated March 6, 2003, from hydrogeologist Kernic to OSM. Id. at 84-86. As we noted in our order of April 26, 2005, in this case, PADEP summarized the basis for its conclusion that the refuse pile was not affecting the Maddocks' well water as follows:

1. The Maddock[s'] water well is at surface elevation 1142 MSL [mean sea level] and is approximately 62 feet deep (See attached Module 8.1A and 8.2h).
2. The static water level fluctuates between 1105 MSL (37 feet from top of casing [TOC]), and 1102 MSL.
3. A stream valley exists between the coal refuse area and the Maddock water well. This stream is at approximate elevation 1095 ML and less as it moves downstream towards the Maddock[s] (See Exhibit 6.2 map).
4. The water quality of the Maddock[s'] well water was very good, i.e., high ph and alkalinity, low metals and sulfate, based upon Department sampling between July 2000 and April 2001 (See attached sampling results).
5. The water quality of water collected from the coal refuse disposal site is very poor, i.e., very low ph, very high metals and sulfate (See attached Module 8, Item 3).

^{10/} Kernic's June memorandum predated the June 27, 2001, test which showed an excess of sulfates on the second sample.

6. The water quality of Little Plum Creek is of poor water quality, especially during the summer and fall months when water levels are low * * *.

Based upon the topography, depth of the Maddock water well (62 feet deep)[, and] the static water level in the well (38' TOC or 1104 MSL), the Maddock water well is not hydrologically connected to the shallow groundwater system of the refuse area. Little Plum Creek, at elevation 1095 MSL and less, acts as a hydrologic barrier. This is made more evident by the poor water quality generated at the refuse site (low ph, high metals and sulfates) versus the good quality water (high ph, low metals, low sulfates) of the Maddock well water. If the Maddock water well was hydrologically connected to the coal refuse site, one would expect the quality of the Maddock well water to also be poor, i.e., low ph, high metals and sulfates, which was not the case between 1998 and 2001.

As a further demonstration to show that the Maddock water well is not hydrologically connected, a peak demand pump test (PDT) was conducted on the Maddock water well on January 18, 2000. * * *

During the PDT, 2 sets of water samples were taken. The first sample was taken just before the second pumping cycle (See attached Exhibit 8). The second water sample was collected during the seventh pumping cycle (See attached Exhibit 9), after * * * approximately 450 gallons of water had been pumped. If the Maddock water well was hydrologically connected to the coal refuse site, one would expect to see the ph and alkalinity decrease and the metals and sulfates increase in the second water sample. However, the ph and alkalinity increased and the metals decreased. There was an increase in sulfate though, indicating a source of sulfate nearby.

Sulfate is typically associated with mining and oil and gas activities. Other than the refuse pile and deep mine, there are other sources for the sulfate. On the hilltop, up slope of the Maddock water well are abandoned surface mines (See attached Map No. 1). There are also many old gas and oil wells in the area (See attached Map No. 2). [^{11/}]

^{11/} Neither Map No. 1 nor Map No. 2 is attached to the copy of the Mar. 6, 2003, Kernic memorandum in the record.

(Mar. 6, 2003, Kernic memorandum at 2-3, AR, Vol I at 85-86.) On the basis of the information provided in the responses from PADEP, HAFO concluded “good cause” had been shown under 30 CFR 842.11 for not conducting an inspection or taking enforcement action. Id. at 103.

In a letter to Cathy Maddock dated March 24, 2003, HAFO noted that there are three regulated coal mining activities that could be the source of mine water in the aquifer: bore hole #10 drilled in July 1998, the refuse pile, and the closed underground mine. (AR, Vol. I at 104.) Based on its “review of the information submitted by PADEP in response to this TDN,” HAFO found that the record “documents that PADEP conducted a thorough technical evaluation of your complaint” and “concluded there are no violations of Pennsylvania coal mining laws or regulations, or of the OSM approved coal regulatory program.” Id. at 105. Accordingly, HAFO found that PADEP had shown “good cause” for not taking action to cause a violation to be corrected under 30 CFR 842.11. Id.

The Maddocks sought informal review of HAFO’s decision on the TDN. Id. at 107. They contended that the drilling of the borehole had changed the hydrology of the groundwater table and enclosed in support of their contention a copy of the draft findings of a private consultant they hired to evaluate the hydrology of their well. Id. at 108-09. The Maddocks also pointed out that PADEP’s testing of their well water did not reflect the quality of the water after it had been put back into use, while the testing done by Vapco and Microbac^{12/} after the well was restored to use, which revealed consistently high sulfate levels above the 250 mg/l MCL, accurately depicted the change in quality occasioned by the long term use of their well. Id. at 107. The Maddocks stated that their water now had high sulfates and a sour smell and caused visible staining, conditions which had not existed before the drilling of the borehole. Id.

The report attached to their request for informal review, entitled “Draft Expert Report on the Maddock Water Well,” was prepared by EEI Geophysical Earth Science Consultants. (AR, Vol. I at 108-09.) EEI conducted an August 13, 2001, inspection of the Maddock property, the gob (refuse) pile, the borehole, the treatment ponds, and the artesian well located near the property and reviewed the data contained in the Maddocks’ files. It concluded that the Maddocks’ water well was hydrologically connected to the area of the borehole, the stream, and the gob pile and was also receiving discharge from the hill behind the Maddocks’ home. Id. The EEI report further stated:

^{12/} The analyses of samples taken on Dec. 26, 2001, Jan. 17, 2002, Feb. 26, 2002, and July 24, 2002, were performed by these firms.

Sampling at the Maddock well indicates that there are two separate sources of water supplying the well. Water originating from behind the home is in better condition geochemically than water coming from the gob pile. When the well is lightly used sulfate levels are low (about 50 [mg/l]) but as soon as the well is pumped heavily, like when it is purged, the sulfate levels climb to 350+.

This abnormality can be explained by looking at the area under which a cone of depression is formed during heavy pumping. This cone forms as the pumping draws untreated water into the well bore from under the gob-pile, from the Consol treatment ponds and from the main stream at the base of the pile. Heavy use of the well extends the recharge area into the polluted zones within the shallow aquifer causing the sulfate levels to increase sharply. The levels of sulfate flowing from the Maddock well during heavy use periods exceed the recommended standards for human consumption.

Id. at 108. The Maddocks provided no explanation of why the report was considered to be a “draft.”

The Regional Director issued his decision on informal review on May 16, 2003. After summarizing the history of the Maddocks’ complaint and the relevant law, he found that PADEP had shown good cause for not taking action in response to the complaint on the ground that no violation existed, and that the conclusion that no violation existed was not arbitrary, capricious, or an abuse of discretion. (AR, Vol. II at 6.) The Regional Director’s explained his finding as follows:

First, I believe that PADEP has conducted an adequate review of your complaint as evidenced by its study of the area and the sampling of your well. As the record shows, PADEP considered the hydrology of the regulated coal mining facilities in your area (e.g., the Renton refuse pile and the associated underground mine beneath your property) in its investigation. PADEP examined the water levels in your well, the topography of the surrounding area, and the water levels of the mine pool in reaching its conclusions.

PADEP extensively sampled your well water for a host of parameters normally associated with mine drainage, including pH, alkalinity, acidity, iron, manganese, aluminum, sulfates, and total suspended solids. In addition, PADEP sampled for [PCBs] and petroleum products. The sampling for PCBs and petroleum products was done because of your concern that water from the underground

mine contained these [contaminants] and could migrate upward to your supply. PADEP conducted this sampling even though the mine pool is 400 feet below the bottom of your well and there was no evidence to suggest that the mine pool water either contained these [contaminants], or that water from the pool could migrate upward to your well. Finally, PADEP also sampled for fecal and coliform bacteria on several different occasions even though these bacteria are not associated with mine drainage. The results of this sampling showed only slight occurrences of metals and no PCBs or petroleum products.

Second, I believe that the conclusions that PADEP drew from its investigation are sound. I am basing this finding on a review of your complaint by a hydrologist at [HAFO] and another hydrologist on my staff. Their reviews of the complaint record show that there is no evidence that the source of the sulfate contamination of your well is the borehole drilled by Consol, nor does the evidence suggest that it is from the refuse pile or the underground coal mining operation. In fact, the evidence indicates that there is no effect from the refuse pile on your water supply because of the differences in the quality of water between the refuse pile and your well. The water from the refuse pile is very high in acidity with no alkalinity, has a low pH, and has a high concentration of metals, while your well water has a high pH and alkalinity and a very low concentration of metals. If the refuse pile were the source of the sulfates in your well water, we would also expect to find a higher metals concentration and lower pH and alkalinity levels in the samples from your well. It is extremely unlikely that sulfates would be the only contaminant reaching your well from the refuse pile.

Finally, the fact that Consol's drilling of borehole #10 in 1998, dewatered your well appears to indicate that groundwater flows toward the refuse pile rather than from the refuse pile toward your well. This would indicate that subsurface drainage from the pile would have a tendency to not flow toward your well and would not contaminate it.

With regard to EEI's report, there is no evidence presented to indicate that the sulfates are being drawn from the refuse pile or deep mine during heavy use of your well. No evidence was presented to support EEI's theory about the cone of depression.

With regard to the rust stains on porcelain fixtures, sulfates are not the cause. Such stains can be caused by iron (a reddish colored stain) or manganese (a blackish colored stain). Even very small

amounts of iron and manganese can cause these stains. The odor you noted you smell in the water can be caused by sulfates that have been converted to sulfide by bacteria, but is not proof that the sulfates are coming from Consol's facilities.

In summary, the record indicates that the source of the sulfates in your well is not from a facility regulated under Pennsylvania's mining program. Accordingly, I find that PADEP's response to your alleged violation was not arbitrary, capricious, or an abuse of discretion. After considering the information available to me, I concur with [HAFO's] decision that PADEP has shown good cause for not taking action on the alleged violation of failure to require Consol to replace your water supply. Therefore, I have no basis for ordering a Federal inspection.

Id. at 6-8.

In the context of this case, we need not adjudicate whether, as Consol asserts, it was not required to amend the permit to include the drilling of the borehole prior to the actual drilling. We note, however, that the notice of intent to drill an exploration well was returned to the operator with an explanation that a permit revision was required and that OSM clearly stated that a permit is required. (AR, Vol. I at 61.) The most relevant provision of the Pennsylvania regulatory program which has been cited before us ^{13/} is found at 25 Pa. Code § 87.119. The regulation at § 87.119 addresses the burden of proof regarding causation of pollution in a water supply:

(b) *Presumption of liability for pollution.*

(1) It shall be presumed, as a matter of law, that a surface mine operator or mine owner is responsible without proof of fault, negligence or causation for all pollution, except bacteriological contamination, and diminution of public or private water supplies within 1,000 linear feet (304.80 meters) of the boundaries of the areas bonded and affected by coal mining operations, areas of overburden removal and storage and support areas except for haul and access roads.

(2) If surface mining activities are conducted on areas which are not permitted or bonded, it shall be presumed, as a matter of law, that the surface mine operator or mine owner is responsible without proof of fault, negligence or causation for all pollution, except bacteriological

^{13/} See Maddocks' Response to a Statement of Reasons Filed by Consol at 9.

contamination, and diminution of public or private water supplies within 1,000 linear feet (304.80 meters) of the land affected by the surface mining activities.

(c) *Defenses to presumption of liability.* There are only five defenses to the presumption of liability provided in subsection (b). For any of the five defenses to apply, the mine operator or mine owner shall affirmatively prove by a preponderance of evidence that one or more of the following conditions exists:

(1) The landowner or water supply company refused to allow the surface mine operator or mine owner access to conduct a water supply survey prior to commencing surface mining activities.

(2) The water supply is not within 1,000 linear feet * * *.

(3) The pollution or diminution existed prior to the surface mining activities as evidenced by a water supply survey conducted prior to commencing surface mining activities and as documented in the approved surface mine permit application submitted to the Department prior to permit issuance.

(4) The pollution or diminution occurred as a result of some cause other than the surface mining activities.

(5) The landowner, water supply user or water supply company refused to allow the surface mine operator or mine owner access to determine the cause of pollution or diminution or to replace or restore the water supply.

(Emphasis added.)

In this case, there is no dispute regarding the applicability of the above-quoted State regulation establishing the presumption of liability for pollution. It is Consol's position, however, that it has established one of the regulatory defenses to that presumption. Consol asserts that "at all times PaDEP insisted that it was Consol's obligation to demonstrate that its activities were not the cause of the Maddocks' alleged problems; and, after months of investigation, Consol was ultimately able to do so to PaDEP's satisfaction." (Brief at 3 n.3.) Therefore, Consol is claiming that, in accordance with 25 Pa. Code § 87.119(c)(4), it affirmatively proved by a preponderance of the evidence that the pollution occurred as a result of some cause other than its surface mining activities.

Section 503(a) of the Surface Mining Control and Reclamation Act of 1977 (SMCRA), 30 U.S.C. § 1253 (2000), provides that the primary jurisdiction of states such as Pennsylvania with approved regulatory programs is subject to the oversight jurisdiction of OSM under section 521(a)(1) of SMCRA, 30 U.S.C. § 1271(a)(1) (2000), which authorizes the Federal inspection of surface coal mining operations if, within 10 days after notice that a violation is believed to exist, the state regulatory agency fails to take appropriate action to cause the violation to be corrected or show good cause for such failure. The oversight inspection provisions of section 521(a)(1), 30 U.S.C. § 1271(a)(1) (2000), are implemented by regulations found at 30 CFR 842.11.

[1] The regulations provide that an authorized representative of the Department (OSM) shall conduct a Federal inspection when OSM has reason to believe on the basis of information available to it that a violation of SMCRA, the applicable state program, or any condition of a permit exists and

[t]he authorized representative has notified the state regulatory authority of the possible violation and more than ten days have passed since notification and the State regulatory authority has failed to take appropriate action to cause the violation to be corrected or to show good cause for such failure and to inform the authorized representative of its response. After receiving a response from the State regulatory authority, before inspection, the authorized representative shall determine in writing whether the standards for appropriate action or good cause for such failure have been met.

30 CFR 842.11(b)(1)(ii)(B)(1). “Good cause” is defined in the regulations to mean several things, including that “[u]nder the State program, the possible violation does not exist.” 30 CFR 842.11(b)(1)(ii)(B)(4)(i). Under the regulations, the standard for determining both “appropriate action” and “good cause” is whether the state agency’s action or response to the TDN is arbitrary, capricious, or an abuse of discretion under the state program. 30 CFR 842.11(b)(1)(ii)(B)(2); Marion Docks, Inc. v. OSM, 168 IBLA 47, 51 (2006); Pittsburg & Midway Coal Mining Co. v. OSM, 132 IBLA 59, 74, 102 I.D. 1, 9 (1995).

In initially explaining its decision not to make an inspection or take any other action in response to the TDN, PADEP relied substantially upon the analysis of its hydrogeologist, Kernic, as set forth in his memorandum of May 30, 2000. In that memorandum, Kernic noted there were five water samples collected from the Maddocks’ well from September 18, 1998, through January 18, 2000. Of the five samples analyzed for mineral content, which were all taken January 18, 2000, Kernic noted that the standard for sulfate was exceeded in two separate analyses of samples

(270 mg/l in the Moody & Associates' sample and 271 mg/l in one of the PADEP samples) and that the standard for iron was exceeded in the last pumping cycle by 0.01 mg/l in the analysis of one of the PADEP samples. (AR, Vol. I at 22, 34-36.) In evaluating the results exceeding the regulatory limits, Kernic expressed the opinion that during normal use the iron and sulfate levels would remain below the regulatory limits. Id. at 22. He did, however, recommend that Consol be required to monitor the quality of the water in the well monthly for a minimum of 1 year. Id.

In his followup memorandum of June 7, 2001, Kernic addressed the monthly water well samples collected by Consol since July 2000. Kernic stated that prior to December 2000, excluding the July 2000 samples which were deemed unrepresentative because this was when the well was first tested after being idle for many months, "the sulfate concentration exceeded the recommended drinking water standard twice (Aug. and Nov. 2000)." Id. at 59. He discounted the excess readings as due to differences in analytical procedures between the laboratories. Id. Two samples were taken on each date, one before purging the well and the other after the well was purged. Id. He disregarded the initial samples on each date taken before the well was purged as unrepresentative of groundwater quality, noting that to obtain representative groundwater samples "one must purge (pump) the well until a minimum of three (3) well volumes had been pumped." Id. Since December 2000, Kernic stated that the water quality measured in the second sample had consistently met the water quality standard.^{14/} Id.; see AR Vol. II at 105 (Ex. 13 to Maddocks' Response to Statement of Reasons).

When OSM required additional explanation, Kernic responded in his March 6, 2003, memorandum that PADEP had collected much data over the years to determine whether any permitted mining activity had affected the quality of Maddocks' water supply. He stated that neither the Renton Deep Mine pool, borehole #10, nor the refuse pile could be hydrologically connected to the Maddocks' well. He based that conclusion on his findings that the Maddocks' well is located at a surface elevation of 1142 feet MSL, is 62 feet deep, and has a static water level of between 1105 feet MSL and 1102 feet MSL. He stated that Little Plum Creek, a valley stream, situated at approximately 1095 feet MSL and "less" as it moves downstream towards the Maddocks, lies between the coal refuse pile and the Maddocks' well and acts as a hydrologic barrier. (AR, Vol. I at 85.) In his testimony in a September 2001 hearing before the EHB, Kernic testified that his conclusion regarding the ability of anything in the stream or below to flow to the Maddocks' well is "based on the water level of [their] well." (AR, Vol. III at 81.) Kernic acknowledged that sampling by PADEP and Moore and Associates had shown an increase in sulfate. However, he noted that

^{14/} Kernic's June memorandum predated the June 27 test which showed an excess of sulfates in the second sample.

sulfate is typically associated with coal mining and oil and gas production and that up slope of the Maddocks' well are abandoned surface coal mines. He also stated that there are many old oil and gas wells in the area. (AR, Vol. I at 86.) PADEP did not comment directly, however, on the sample analyses offered by the Maddocks with their citizen complaint, all showing high sulfate levels.

The Maddocks challenge PADEP's conclusion that there is no hydrologic connection between Consol's operations and the well aquifer. In their initial brief on appeal, the Maddocks assert that the bottom elevation of their well is at least 20 feet below the elevation of Little Plum Creek. (AR, Vol. II at 10.) Although the static water level of the well is above the level of Little Plum Creek, the record indicates that, if the well were to be drawn down dramatically, as in the PDT, the static water level in the well might drop as much as 11 to 12 feet, which, during the PDT put the well water level at the end of the pumping cycle at about 1093 or 1094 feet MSL. See Moody Report at Table 1, AR, Vol. 1 at 53-55.

When questioned whether high sulfate levels could be the result of the PDT, Kernic answered in the affirmative, acknowledging that "the excess stress put on that aquifer could be drawing water from areas further away than normally where that type of water could be present and captured within the cone of depression of that water well." (AR, Vol. III at 95.) While Kernic emphasized that the PDT was a "very stressful test on a water well" and did not "mimic normal water usage," the results of the PDT, cited above, relating to the well water levels indicate that the aquifer could be drawing water from Little Plum Creek or from Consol's permitted area.^{15/}

Kernic's testimony at AR, Vol. I at 97, that it was not common to find just elevated sulfates in a water supply affected by mining, and that one would also typically find elevated metal levels and depressed pH, could be considered as supporting the position that the Maddocks' well was not being affected by Consol's surface mining activities. However, it also undercuts his conclusion that abandoned

^{15/} We note that while the Regional Director speculated that the dewatering of the Maddocks' well due to the drilling of borehole #10 indicated that groundwater flows toward the refuse pile rather than from the refuse pile to the well, Kernic's explanation for the dewatering related to the fact that borehole #10 punctured a lower groundwater aquifer feeding monitoring well #1, which is artesian, meaning that the lower water system was under pressure. Drilling of borehole #10 caused the well to cease flowing artesian and drop "close to 30 feet in elevation." (AR, Vol. III at 85.) "In doing so, it allowed the shallower ground water system or the water table to drop and, therefore, you saw that occur in Mr. Maddock's water well when it dried up." Id. Therefore, we do not consider dewatering as evidence of the direction of groundwater flow in the shallow aquifer.

surface coal mines up slope of the Maddocks' well could be the source of high sulfates in their water supply.

The problem as we see it is that the Maddocks presented some new evidence with their citizen complaint of increasing sulfate levels in their well water following their resumption of use of the well, which has not been adequately addressed, particularly in light of the presumption of liability established by 25 Pa. Code § 87.119(b). The Maddocks offered the results of the analysis of six water samples. The Maddocks state that they took samples from their well "on the same days" as "a company named Vapco [Engineering]. Vapco was hired by Coal Valley Sales (CVS) to test the water quality of the neighboring wells at the Renton Pile location," as part of an application process for a permit to remine the refuse pile. (AR, Vol. I at 2.) The water quality reports provided by the Maddocks show analyses by Vapco on a December 26, 2001, sample (*id.* at 5), by Vapco on a January 17, 2002, sample (*id.* at 6), by PADEP on a June 27, 2001, sample (*id.* at 7), and by Microbac Laboratories, Inc. (Microbac) on samples taken on December 26, 2001, February 26, 2002, and July 24, 2002, presumably by the Maddocks.^{16/} *Id.* at 8-10. There is no indication on the face of the first three reports that they relate to the Maddocks' well. The source for the samples is reported thereon as "Renton Pile: MP-24," "Renton Pile: 24," and "MP ID: MW-4," respectively. Assuming the first two are from the same source, the sample from "Renton Pile: 24" lists the "FLOW RATE" as 41.8 "gal/min [gallons per minute] or cfs [cubic feet per second]," which Consol asserts "is an exceptionally high flow rate for a 'domestic' water supply source." (Brief at 12 n.13.) Even if it represents a sample from the Maddocks' well, Consol claims, "it cannot be considered one that was taken under normal use conditions." *Id.*

The PADEP analysis report for a June 27, 2001, sample states that it is from a "Private Drinking Well," but the results of the measured parameters do not match the results for the June 27, 2001, tests of the "Maddock House Well" set forth in the record at AR, Vol. II page 105.^{17/} Furthermore, while each of the Microbac reports shows sulfates far exceeding the contaminant level, iron is, in each case, below the 0.3 mg/l contaminant level. In addition, none of the Microbac reports describe the specific conditions under which the sample was taken, *i.e.* whether sampling occurred under normal usage conditions.

^{16/} Despite the Maddocks' representation regarding sampling days, the only overlap between their samples and Vapco's is for December 26, 2001.

^{17/} The results on the report accompanying Maddocks' complaint shows sulfates at 353.9 mg/l, while sulfates are listed as 280 mg/l for the June 27, 2001, sample on page 105 of the AR, Vol. II.

Despite the limitations on the evidence provided by the Maddocks, in our view the substantially elevated sulfate levels in the Microbac reports should have triggered some response by PADEP, rather than reliance on older water well sampling and the asserted existence of a hydrologic barrier.

On the record before us, we find that appellants have sustained the burden of showing that PADEP's response to the TDN indicating that good cause existed for failure to take further action because there was no violation was arbitrary, capricious, and an abuse of discretion in light of the more recent information developed in this case. The Board will not substitute its judgment for that of the State agency, but the analysis of record must reflect consideration of relevant factors. Ernest Back, 135 IBLA 246, 250 (1996). When facts of record casting substantial doubt upon the finding of no violation have not been addressed by the agency, the decision becomes arbitrary and capricious. Samples showing excessive sulfates in January, July, August, and November 2000 were disregarded on various grounds. When asked to respond to later samples showing excessive values for sulfates, PADEP made no further investigation. Rather, in finding no violation existed, it relied upon a conclusion that there was no hydrologic connection between the water well and the regulated activities at the refuse pile because the elevation of the intervening Little Plum Creek was lower than the water level in the Maddocks' well. In view of the evidence that well water problems increased during the substantial pumping associated with the PDT and the samples taken after the well was restored to service, we find that PADEP abused its discretion when it failed to investigate further in view of the excessive sulfate levels in the well.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the prior decision of the Board is reaffirmed on reconsideration and the decision of OSM not to conduct a Federal inspection is reversed.

C. Randall Grant, Jr.
Administrative Judge

I concur:

Bruce R. Harris
Deputy Chief Administrative Judge