

**CASE NO. 01-3072**

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UNITED STATES COURT OF APPEALS  
FOR THE SIXTH CIRCUIT

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SYD H. LEVINE

Petitioner

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Respondent

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PETITION FOR REVIEW OF AN ORDER OF THE  
ENVIRONMENTAL PROTECTION AGENCY  
ENVIRONMENTAL APPEALS BOARD

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**BRIEF FOR PETITIONER**

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<sup>1</sup> A Glossary was created for inclusion in Petitioner’s Reply Brief and the Joint Appendix, and is now included here for the Court’s convenience.

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## **GLOSSARY**

Annulus (Annular Space)	The space between two strings of tubulars, as in the space between tubing and casing
Annulus Gel	Water based bentonite clay gel used as an annular fluid
AOC	Administrative Order on Consent
AOR	Area of Review
Apx.	Joint Appendix
Aquifer	Geological formation capable of yielding a significant amount of water to a well or spring (40 C.F.R. §§144.3 AND 146.3)
A.R.	Administrative Record
Brine	Salt Water
Casing	Steel pipe, often 4-1/2 or 5-1/2 inch outside diameter, usually cemented into the drilled wellbore
Class IIR	Enhanced oil recovery injection well
EAB	U.S. EPA Environmental Appeals Board
DOJ	Department of Justice
EPA	United States Environmental Protection Agency
EPA Region IV	EPA Regional Office in Atlanta Georgia (covering Kentucky)
FOIA	Freedom of Information Act
gpm	gallons per minute

MAP	Monitoring of Annulus Pressure MIT (described at 40 C.F.R. §146.8(b)(1))
MIT	Mechanical Integrity Test (see 40 C.F.R. §146.8)
Packer	Downhole sealing device
psi (psig)	pounds per square inch (gauge)
PWS	Public Water System
Reg-Fix	1993 Technical changes to the UIC regulations
SAPT	Standard Annular Pressure Test (the MIT described at 40 C.F.R. §146.8(b)(2))
SDWA	Safe Drinking Water Act
Tubing	Small diameter pipe sometimes run into casing and set near the top of the injection interval.
UIC	Underground Injection Control
USDW	Underground Source of Drinking Water



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ENVIRONMENTAL APPEALS BOARD (EAB)

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**BRIEF FOR PETITIONER**

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**STATEMENT OF JURISDICTION**

This is an appeal of an Order of the Environmental Protection Agency (EPA) Environmental Appeals Board (EAB) covering two underground injection control (UIC) permits. EPA regulates underground injection, including

permitting of injection activities, through regulations promulgated pursuant to the Safe Drinking Water Act (SDWA).

40 C.F.R. §124.19(a) designates the EAB for appeals of final UIC permit decisions. A petition to the EAB is a prerequisite to seeking judicial review. 40 C.F.R. §124.19(e). The EAB decided the two UIC permit appeals at issue in a single Order dated May 27, 1999. (A.R. 114, Apx. 59-94.) EPA final action was the issuance of two revised UIC permits, dated and mailed December 12, 2000. (A.R. 94, Apx. 95-115; A.R. 95, Apx. 116-137.)

The Court of Appeals has jurisdiction to hear this appeal pursuant to 42 U.S.C. §300j-7(a) and 40 C.F.R. §124.19(f)(1)(iii).<sup>1</sup>

The Petition for Review was filed on January 24, 2001, within the 45 day statutory deadline from the December 12, 2000 final permit decision.

This appeal is from the final Order and final permit decisions. All administrative remedies have been exhausted and this matter is ripe for appeal.

## **STATEMENT ON STANDING**

The United States has moved the court to dismiss this appeal for lack of standing. The issue has been extensively argued, with even a Surreply, a

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<sup>1</sup> Petitioner anticipates Respondent will characterize this appeal as an untimely challenge to the UIC regulations under 42 U.S.C. §300j-7(a)(1), with this Court lacking jurisdiction. This is not the case. The Court has jurisdiction under the explicit language of the SDWA and the APA.

Response to Petitioner's Surreply, and a Memorandum in Opposition to United States' Motion for Leave to File Response to Petitioner's Surreply. Therefore, Petitioner would here only summarize his position on standing.

Petitioner utilizes a domestic water well at his domicile very near the oil and gas leaseholds at issue. Petitioner's domestic water well is at risk as a result of the misguided imposition of the closed annulus requirement and the failure to allow annulus gel for the very shallow injection wells at issue herein. Petitioner reasonably bases standing on concerns about his domestic water well.

Further, Petitioner derives his livelihood from the oil and gas business. EPA's improper regulation of the injection wells at issue is a legitimate concern for any and all oil and gas industry workers in the area at issue. Petitioner reasonably bases standing on very real economic injury.

Finally, the United States suggests in its pleadings that your Petitioner would never be held responsible for subsequent enforcement actions concerning the matters under appeal. This assertion is contrary to EPA's position that virtually any individual exercising control over injection operations can be held accountable as an "operator". Petitioner reasonably bases standing on very real terror of subsequent EPA enforcement activity.<sup>2</sup>

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<sup>2</sup> Petitioner believes "terror" is the appropriate word. Petitioner has been found personally liable as an operator of injection wells where said wells were owned

Petitioner believes he has standing under Article III, and that he further satisfies the prudential standing limitations.

## **STATEMENT OF ISSUES PRESENTED**

I. Whether EPA erred in denying the use of annulus gel after remand of said issue by the EAB.

II. Whether EPA erred in continuing to require a closed annulus after remand of said issue by the EAB.

III. Whether the EAB erred in denying review of the failure of EPA to grant relief under 40 C.F.R. §144.16 (Waiver of requirements by Director) based on the assertion that EPA has discretion to fully regulate the subject injection wells even in the absence of an underground source of drinking water (USDW).

## **STATEMENT OF CASE**

This case involves two UIC permits issued by EPA to Jett Black, Inc. covering a number of injection wells located on two oil and gas leaseholds in Hancock County, Kentucky.

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and operated by corporations. The litigation and ruinous monetary penalty has been the worst experience of your Petitioner's life. United States v. Syd H. Levine & Associates, et al., C.A. No. 4:97CV-169-M.

On December 16, 1997, EPA proposed issuance of UIC permit KYA0361 covering the Randolph Boling lease injection wells (A.R. 7), and on December 30, 1997, permit KYA0362 covering the Boling-Richards Unit lease injection wells (A.R. 20). Petitioner individually timely made comments on the two draft UIC permits on February 27, 1998. (A.R. 4.) On March 16, 1998, EPA issued final UIC permits KYA0361 and KYA0362. (A.R. 1; A.R. 18.)

Petitioner individually filed two Petitions for Review dated April 21, 1998, with the EAB. (A.R. 97, Apx. 9-20; A.R. 98, Apx. 21-32.) The EAB decided UIC Appeals Nos. 98-3 and 98-5 in a single Order Denying Review in Part and Remanding in Part on May 27, 1999. (A.R. 114, Apx. 59-94.) Seven permit decisions were remanded; for all other issues raised, review was denied.

By letter dated December 1, 2000, Region IV EPA addressed the seven remanded issues. (A.R. 115, Apx. 140-144.) On December 12, 2000, EPA issued final UIC permits KYA0361 and KYA0362 (A.R. 94, Apx. 95-115; A.R. 95, Apx. 116-137), the final appealable agency action. 40 C.F.R. §124.19(f)(1).

Petitioner filed a new Petition for Review dated January 15, 2001, seeking further EAB review of two remanded issues. (A.R. 116, Apx. 33-58.) The EAB denied review with an Order Dismissing Petition for Review on January 19, 2001. (A.R. ?)

The Petition for Review herein was filed January 24, 2001. (Apx. 138.)

## STATEMENT OF FACTS

### 1. Petitioner

Petitioner has been a resident of Hancock County, Kentucky, at the same address for 25 years, and involved in the petroleum industry in Hancock County for 27 years.

Petitioner's residence is located on property historically contiguous to the property comprising the Boling-Richards Unit lease owned by Jett Black, Inc. Petitioner's residence relies on a water well for domestic water supply, the nearest actively used water well to said facility. Petitioner has also personally consumed water from a water well located on the Boling-Richards Unit lease. Certain UIC permit conditions covered by this appeal are a threat to Petitioner's domestic water supply well.

Petitioner's livelihood is dependent on the oil industry. Petitioner has personally worked on the Boling-Richards Unit lease injection wells, and will almost certainly do so in the future. Certain UIC permit conditions covered by this appeal have and will directly affect Petitioner's economic well-being. (*See* Affidavit of Syd H. Levine filed with Response Memorandum in Opposition to Respondent's Motion to Dismiss for Lack of Standing.)

## **2. History**

In 1989, Panther Creek Oil Company, Inc. and Cranoil Kentucky, Inc., predecessor owners of the two oil and gas leaseholds at issue herein, and EPA entered into Administrative Order on Consent (AOC) Docket No. 4-UICC-035-88. (A.R. 45.) Pursuant to the requirements of said AOC, Kenneth R. Ingle Associates, Inc., now known as Jett Black, Inc., submitted two UIC permit applications on June 30, 1989, covering certain Class IIR (enhanced recovery) existing rule authorized injection wells located on the Randolph Boling lease and on the Boling-Richards Unit lease in Hancock County, Kentucky. (A.R. 16; A.R. 43.)

On December 16, 1997, and on December 30, 1997, draft UIC permits were proposed for the subject injection wells. (A.R. 7; A.R. 20.) Petitioner submitted timely written comments on February 27, 1998. (A.R. 4.) On March 16, 1998, EPA issued final UIC permits KYA0361 and KYA0362. (A.R. 1; A.R. 18.) A Response to Comments dated March 16, 1998, was also prepared by EPA. (A.R. 3.) Your Petitioner filed two Petitions for Review dated April 21, 1998, with the EAB. (A.R. 97, Apx. 9-20; A.R. 98, Apx. 21-32.) The EAB decided the two UIC appeals in a single opinion dated May 27, 1999. (A.R. 114, Apx. 59-94.) Seven permit decision issues were remanded; on all other issues, review was denied.

By letter dated December 1, 2000, Region IV EPA addressed the remanded issues. (A.R. 115, Apx. 140-144.) The EAB declined to further review two of the previously remanded issues. (A.R. ?) This appeal followed.

### **3. The Wells**

The injection wells at issue are old existing enhanced recovery wells, referred to as Class IIR wells in the UIC program. These injection wells were used for many years before the effective date of the UIC program in Kentucky (June 25, 1984). The subject wells are very shallow by oil industry standards; only one of the injection wells exceeds 300 feet in depth to the base of the injection zone. (A.R. 94 at 2, Apx. 97.) No allegation has been made that the subject wells have ever caused any environmental problems.

### **4. Annulus Gel (Annulus Fluid)**

Injection wells are typically constructed with steel casing cemented into the drilled wellbore. Smaller pipe, called tubing, is often run into the casing and set near the top of the injection interval with a sealing device called a packer. The space between the outside of the tubing and the inside of the casing is called the annulus. The annulus is generally filled with fluid. Petitioner requested that gel and fresh water be added to the list of annular fluids in his original comments on the 1997 draft UIC permits. (A.R. 4 at 4-5.) The EAB remanded the annulus gel issue. (A.R. 114 at 19, Apx. 78.) However, Region IV EPA



declined to allow the use of annulus gel, retaining the original previously appealed language. Region IV EPA addressed the remand of the annulus gel issue in its December 1, 2000 letter. (A.R. 115 at 1-2, Apx. 140-141.)

**a. Reversal of Past Practices**

EPA asserts it "...can find no instances where gel was used as an annular fluid additive in Region IV". (*Id.* at 1, Apx. 140.) Region IV EPA goes so far as to mention a deposition of Petitioner wherein Petitioner declined to name names of operators known to have used annulus gel with EPA permission. (*Id.* at 1, Apx. 140.) However, the immediately prior testimony is absolutely unambiguous and uncontradicted that annulus gel has been used in Hancock, Ohio, and Henderson Counties, Kentucky. (A.R. 117 at 183, Apx. 191.) The refusal to allow the continued use of annulus gel is most assuredly a reversal of past practices and evidence does exist to support same. (*See* A.R. 116 at 5-8, Apx. 37-40 *and* A.R. 122 at 1-2, Apx. 145-146.)

**b. Corrosion**

Region IV EPA persists in its assertion that gel will not inhibit corrosion in the annular area. (A.R. 115 at 2, Apx. 141.) This position was first enunciated in EPA's Response to Petition for Review, not having been previously mentioned. (A.R. 101 at 13, Apx. 239.) Simply stated, annulus gel is no more or less corrosive than the water it is prepared with; an annulus gel

prepared with fresh water (the norm) is inherently less corrosive than brine. (*See* A.R. 102 at 17-18, Apx. 271-272; A.R. 116 at 8-9, Apx. 40-41; *and* A.R. 122 at 2, Apx. 146.)

### **c. Gel and Mechanical Integrity**

Region IV EPA expresses a new concern in its December 1, 2000 remand response letter, that annulus gel might "...contribute to or mask the loss of a well's mechanical integrity." (A.R. 115 at 2, Apx. 141.) These new arguments are without scientific merit and are somewhat circular. A detailed technical analysis is contained in the January 15, 2001 Petition for Review. (*See* A.R. 116 at 8-14, Apx. 40-46 *and* A.R. 122 at 1-2, Apx. 145-146.)

## **5. Annulus Status**

Injection wells constructed with an annulus can have said annulus sealed with appropriate fittings at the top or they may be operated with an annulus open to atmosphere. The preferred method of operation is dependent on regulatory requirements, and on technical considerations including the depth of the well, subsurface geology, etc. Petitioner requested that an open annulus be allowed in his comments on the 1997 draft UIC permits. (A.R. 4 at 5.) The EAB remanded the annulus status issue. (A.R. 114 at 20-21, Apx. 79-80.) However, Region IV EPA declined to allow an open annulus, retaining the original previously

appealed language. Region IV EPA addressed the remand of the annulus status issue in its December 1, 2000 letter. (A.R. 115 at 2-3, Apx. 141-142.)

**a. Consistency**

There is no dispute that the wells at issue are rule authorized Class IIR enhanced recovery injection wells. (A.R. 101 at 2, Apx. 228.) A closed annulus and annulus monitoring is not required for hundreds of rule authorized Class IIR enhanced recovery injection wells that surround the subject facilities. (*See* A.R. 116 at 17, Apx. 49.) The subject injection wells are indistinguishable from surrounding rule authorized wells (except Region IV EPA forced the wells herein to be permitted, arguably unnecessarily). (*See Id.* at 18, Apx. 50 *and* A.R. 101 at 19, Apx. 273.)

**b. Open Annulus Preferred**

A closed annulus is not necessarily more protective than an open annulus. With very shallow wells, an open annulus can often provide an indication of a problem faster and more conclusively than a closed annulus. A detailed technical analysis is contained in the January 15, 2001 Petition for Review. (*See* A.R. 116 at 18-25, Apx. 50-57 *and* A.R. ?, Apx. 150-154.) A useful table entitled “Open Versus Closed Annulus Comparison” can be found in the Joint Appendix at pages 55 and 153.

## **6. Underground Sources of Drinking Water (USDWs)**

The UIC provisions of the SDWA do not protect all groundwater, but rather only that groundwater “...which supplies or can reasonably be expected to supply any public water system...” 42 U.S.C. §300h(d)(2). Consistent with this limiting language, the UIC regulations define the term “underground source of drinking water” (USDW) at 40 C.F.R. §144.3. Petitioner argued that absent a USDW, Region IV EPA should grant relief as contemplated at 40 C.F.R. §144.16, but the EAB declined review, interpreting 40 C.F.R. §144.16 to be wholly discretionary with the Director. Because the argument that follows deals with the nature of that discretion, some material on USDWs is included below.

Petitioner has held for years that no USDWs exist under the area at issue. The aquifers in the subject area are small in areal extent with low yields, and could not conceivably supply a public water system (PWS) as defined by the SDWA. (*See* A.R. 111 *and* A.R. 112.) Even as far back as 1995, Region IV EPA seemed to realize no USDWs exist under the area in question. (A.R. 113.) Interestingly, Region IV is the only EPA region to create a document specifying the yield criteria used to define an aquifer as a USDW. (A.R. 105.)

Recently, Respondent has unambiguously declared that no USDWs exist under the subject facilities.<sup>3</sup> In the United States' Memorandum on Penalties and Injunctive Relief in United States v. Syd H. Levine & Associates, et al., C.A. No. 4:97CV-169-M, at page 12 the United States offers:

Despite the ease with which Levine could apparently have proved the absence of a USDW, he never "made good" on his threats in a manner that complied with the AOC. It was not until this litigation commenced that Levine engaged the services of a hydrologist in whose expertise the EPA could have confidence.

and at page 22:

Although in the AOC Levine assumed responsibility for demonstrating the absence of a USDW, he provided EPA with no adequate evidence until after this litigation commenced, when he supplied experts' reports sufficient to satisfy that responsibility.

and at page 30:

The court should note that EPA is willing to allow Levine to prove mechanical integrity of his wells by means of a variant RTS, now that a scientific basis for concluding no USDW will be endangered by Levine's injection activity.

(Apx. 169, 179, 187.)

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<sup>3</sup> Respondent attempts to lessen the significance of these clear statements in subsequent pleadings. However, such unequivocal statements hardly lend themselves to multiple interpretations.

## **SUMMARY OF ARGUMENT**

I. Upon remand, EPA should have allowed the use of annulus gel. Annulus gel has been used and approved in Region IV, and the refusal to include annulus gel as an acceptable annular fluid in the subject permits is arbitrary, capricious, and an abuse of discretion. Further, the regulations do not prohibit annulus gel. Finally, the agency's position is unsupported by substantial evidence.

II. Upon remand, EPA should have allowed the open annulus mode of operation. A closed annulus with monitoring is not required as a matter of law for Class IIR injection wells. Further, an open annulus is allowed for all non-permitted Class IIR injection wells in Kentucky; to require a closed annulus for the subject rule authorized injection wells is arbitrary, capricious, and an abuse of discretion. Finally, the evidence is overwhelmingly clear that an open annulus is the preferred mode of operation for the very shallow injection wells at issue herein, and the agency's position is unsupported by substantial evidence.

III. The EAB erred in denying review of relief sought under 40 C.F.R. §144.16. The agency concludes that it can fully regulate underground injections, even in the absence of a USDW. However, said position is clearly in excess of statutory jurisdiction, authority, and limitations.

## STATEMENT OF STANDARD OF REVIEW

Absent a statutorily defined type of review, the standard for review for formal administrative adjudication is found in the Administrative Procedures Act (APA). Factual findings are subject to the “substantial evidence” test. 5 U.S.C. §706(2)(E). Application of the Chevron doctrine is discussed in the Argument section that follows.

Agency action must not be arbitrary, capricious, or an abuse of discretion. 5 U.S.C. §706(2)(A). The arbitrary and capricious standard requires the Court to “..consider whether the [agency’s] decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment.” Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 416 (1971). Agency actions may only be upheld on the basis articulated by the agency itself. *See* Motor Vehicle Mfrs. Ass’n v. State Farm Mut., 463 U.S. 29, 50 (1983). Consequently, there must be a rational connection between the facts found and the decision rendered. *Id.* at 43.

The SDWA does contain one provision concerning judicial review. The Court may compel additional evidence to be taken before the Administrator, if deemed necessary. 42 U.S.C. §300j-7(c).

## **ARGUMENT**

### **I. Annulus Gel Was Improperly Excluded as Annular Fluid**

Region IV EPA asserts that it can find no evidence that annulus gel was approved and used in Region IV. (A.R. 115 at 1, Apx. 140.) But Region IV must not have looked very hard. Petitioner has testified under oath that annulus gel was used and approved in Region IV, and that the very concept was introduced to him by Region IV personnel. (A.R. 117 at 183, Apx. 191.) Copies of two letters are also present in the Administrative Record. (A.R. 118, Apx. 338; A.R. 119, Apx. 339.) The truth is that annulus gel has been used in dozens of wells in Kentucky, with the knowledge and approval of Region IV UIC personnel and contract inspectors no longer with the program. The refusal of Region IV to allow annulus gel as an annular fluid is an arbitrary and capricious reversal of past practices and constitutes an abuse of discretion.

Region IV EPA's final permit decision upon remand is unsupported by substantial evidence. Region IV's position that annulus gel does not inhibit corrosion is utter nonsense. Annulus gel is no more corrosive than the water it is made with, and under normal preparation practice it is less corrosive than plain brine. The UIC regulations do not require corrosion inhibitors for the annular fluids in Class IIR injection wells, nor do the UIC permits herein require same, pointing to the disingenuous nature of Region IV's objection.



Region IV EPA's other technical objections are not based on good science, nor do they take into account that Region IV approved annulus gel in the past. Annulus gel is protective of the environment when used in the very shallow injection wells at issue (it has also been used in much deeper wells elsewhere in Kentucky), something Region IV EPA well understood a decade ago. It has been previously approved and used in Region IV, and the suggestion that it could be or needs to be approved under a recent National UIC Technical Workgroup document (which document does not even rise to the level of a UIC guidance publication) is unfair and punitive.

The technical and regulatory underpinning for the use of annulus gel is voluminous. It can be found at A.R. 116 at 4-15, Apx. 36-47 and A.R. 122 at 1-2, Apx. 145-146.

### **Annulus Gel Summary**

There is no regulatory prohibition against annulus gel. Annulus gel is a safe and effective solution available to the smallest "mom and pop" oil operators for minimal cost. Region IV allowed annulus gel a decade ago and gave it their blessing, and is now acting in an arbitrary and capricious manner that serves the best interest of none, including the environment.

## **II. A Closed Annulus Cannot Be Required for Class IIR Wells by the UIC Regulations, and Is Not the Preferred Mode of Operation**

Upon remand, Region IV EPA cited 40 C.F.R. §146.8(b)(1) to support its position that it had legal authority to require a closed annulus and monitoring of the annulus pressure. However, 40 C.F.R. §146.8(b)(1) describes a particular MIT, not a monitoring requirement. The subject injection wells are required to use the standard annular pressure test (SAPT) MIT (a creation of 40 C.F.R. §146.8(b)(2)) by Section I.B.3. of the two new final UIC permits, not the monitoring of annulus pressure (MAP) MIT of 40 C.F.R. §146.8(b)(1). Even if dual internal MITs could be justified, 40 C.F.R. §146.8(b)(1) was amended in 1993 (Reg-Fix), such that the 0 psig well head annulus pressure required in the subject UIC permits is now prohibited by the regulations. The post Reg-Fix 40 C.F.R. §146.8(b)(1) requires “..maintaining an annulus pressure different from atmospheric...” Ironically, FOIA requests to Region IV reveal that the Region has never allowed an operator in Kentucky to use the 40 C.F.R. §146.8(b)(1) MAP MIT, but at the same time would here argue that said section authorizes the use of annulus monitoring for Class IIR enhanced recovery injection wells.

The regulations distinguish between an MIT and monitoring requirements. The criteria and standards for MITs are contained in 40 C.F.R. §146.8. The criteria and standards for monitoring of Class II wells are contained

in 40 C.F.R. §146.23(b). Compare 40 C.F.R. §146.23(b) to the parallel monitoring requirements for Class I (hazardous waste disposal) wells at 40 C.F.R. §146.13(b). Class I wells have a requirement to monitor “..the pressure on the annulus between the tubing and the long string of casing...” 40 C.F.R. §146.13(b)(2). No such monitoring requirement exists in the equivalent Class II regulations at 40 C.F.R. §146.23(b). Even more telling is the Class I requirement at 40 C.F.R. §146.13(a)(3) that “..the annulus between the tubing and the long string of casings shall be filled with a fluid approved by the Director and a pressure, also approved by the Director, shall be maintained on the annulus.” There is no such requirement at 40 C.F.R. §146.23(a) for Class II wells.

There is no regulatory requirement for annulus monitoring for Class II injection wells. There is no regulatory requirement for Class II injection wells that the annulus be closed. Region IV EPA, by its own action with regard to thousands of rule authorized Class II injection wells, has demonstrated annular monitoring is not required, nor is it necessary for Class II wells. The EAB is correct that Region IV EPA may “..require monitoring of annulus pressure in appropriate circumstances...”, but only as an MIT, not as a monitoring requirement for Class II injection wells. Region IV EPA chose the SAPT MIT

and has not explained why the MAP MIT is also necessary, nor how the MAP may be used in conflict with the explicit language of 40 C.F.R. §146.8(b)(1).<sup>4</sup>

Annulus monitoring is not required for hundreds of rule authorized wells that surround the subject facilities. Your Petitioner knows of not one single rule authorized injection well for miles around the herein permitted wells that is required to monitor annulus pressure, and many, if not most, have open annuli. It should be noted that Region IV concedes that the subject existing injection wells are rule authorized Class IIR wells, hence they are indistinguishable from surrounding rule authorized wells. Under these circumstances, the closed annulus and monitoring requirements for the subject injection wells is arbitrary, capricious, and an abuse of discretion.

From a technical standpoint, Region IV EPA's final decision upon remand is unsupported by substantial evidence. Region IV EPA ignores irrefutable evidence that an open annulus is the preferred mode of operation for the very shallow injection wells at issue. (*See* table and accompanying text at Apx. 55.) They even ignore studies that reveal that a closed annulus can result in huge pressure buildups in the closed annular space with just a few degrees of temperature change. Ironically, Region IV EPA has been so technically

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<sup>4</sup> Presumably, Region IV did not actually intend to require the MAP MIT in addition to the SAPT, but that is the effect of the exercise.

deficient with respect to the closed annulus requirement, that almost all UIC permits for Class II wells set a vacuum action trigger that could never be seen, rendering the requirement moot! (*See* A.R. 123, Apx. 148-149.) The technical underpinning to support the superiority of an open annulus for these very shallow wells is voluminous. It can be found at A.R. 116 at 18-25, Apx. 50-57 and A.R. ?, Apx. 150-154.

### **Annulus Status Summary**

The UIC regulations neither support annulus monitoring, nor a closed annulus, for Class II injection wells; annulus pressure monitoring with a closed annulus is only mandated for Class I wells. 40 C.F.R. §§146.13(b)(2), 146.13(a)(3). There is a monitoring of annular pressure (MAP) MIT that is a creature of 40 C.F.R. §146.8(b)(1), but Region IV EPA has never approved its use in Kentucky, and it should not be confused with monitoring requirement set out elsewhere in the regulations. Thousands of rule authorized Class II injection wells are allowed to operate without a closed annulus; thus, there is a substantive question of fairness and consistency at issue. An open annulus is the preferred mode of operation for the very shallow Class IIR injection wells at issue herein.

### **III. EPA Lacks Statutory Authority to Regulate Underground Injection Where No USDW Exists**

The EAB denied review of Petitioner's request for the relief contemplated at 40 C.F.R. §144.16. (A.R. 114 at 12-13, Apx. 71-72.) The EAB reasoned that:

..even if it were true that the injection wells do not endanger any USDWs, the Region was not required to provide relief under section 144.16. ... That section authorizes but does not require less stringent permitting requirements. Thus, in order to support a grant of review, petitioners must show why, in the absence of a USDW, the Region's decision not to impose less stringent requirements was clearly erroneous.

(A.R. 114 at 13, Apx. 71.) But EPA lacks authority to regulate, or at least fully regulate, injection wells absent a USDW.<sup>5</sup>

#### **A. Regulation of Injection Where No USDW Exists is *Ultra Vires***

The UIC regulations were promulgated pursuant to the SDWA. It is of course a fundamental legal principle that administrative regulations must not extend their reach beyond the delegating legislation. The SDWA provides that:

Underground injection endangers drinking water sources if such injection may result in the presence in underground water which

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<sup>5</sup> Petitioner anticipates Respondent will protest that arguing for reduced or no regulation is inconsistent with Petitioner's expressed concern for his domestic water well. However, Petitioner's domestic water well survived over 50 years with no UIC program, with injection wells all around it. It is not so clear it will survive misguided requirements like the closed annulus, mechanical integrity tests (MITs) at excessive pressures, etc. The agency fails to account for the unique hydrology and extremely shallow depths of the wells at issue. Bad regulation is worse than no regulation at all.

supplies or can reasonably be expected to supply any public water system of any contaminate....

42 U.S.C. §300h(d)(2). A public water system (PWS) is defined as a system for provision to the public of water for human consumption with at least fifteen (15) service connections or twenty-five (25) regular users. 42 U.S.C. §300f(4).

The UIC regulations contain a definition of USDW consistent with 42 U.S.C. §300h(d)(2). 40 C.F.R. §144.3. The UIC regulations acknowledge that not all aquifers are USDWs, and that aquifers that do not fit the definition of a USDW are not subject to the special protection afforded USDWs. 40 C.F.R. §144.1(g). Region IV EPA has even gone to the trouble of attempting to set an aquifer yield necessary to define a USDW, clearly acknowledging the jurisdictional limitations of the SDWA. (A.R. 105.) Further, the SDWA offers specific instruction that the agency's UIC regulations are not to interfere with or impede oil and gas related injections unless essential to protect a USDW. 42 U.S.C. §§300h(b)(2); 300h-1(c).

As discussed in the next subsection, EPA considered not regulating injection wells where no USDW exists; however, the present regulatory scheme was adopted with relief for such injections set out at 40 C.F.R. §144.16. For the agency to now interpret its regulations to allow **complete** discretion to regulate underground injections where no USDW exists clearly exceeds statutory

jurisdiction, authority, and limitations. The SDWA is unambiguous in limiting its UIC reach to groundwater capable of serving a PWS. Had Congress intended the SDWA UIC provisions to apply to all groundwater, it would have been easy to so say.

Under the Chevron doctrine, courts evaluate agency interpretation of authorizing statutes through a two-step process.

First, always, is the question whether Congress has directly spoken to the precise question at issue. If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.

Chevron U.S.A. v. Natural Res. Def. Council, 467 U.S. 837, 842-843 (1984).

Here the intent is about as clear as it gets. But Respondent will no doubt argue the SDWA is ambiguous and that the second prong of the Chevron doctrine should be applied, with great deference to agency interpretation. Even if it were so, a recent decision of the United States Supreme Court is instructive:

Here, the statute is ambiguous... The EPA may not construe the statute in a way that completely nullifies textually applicable provisions meant to limit its discretion.

Whitman v. American Trucking Assns., Inc., 531 U.S. 457, \_\_\_ (2001).

A recent decision of the United States Supreme Court illuminates the limits of agency power. In Solid Waste Agency v. Corps of Engineers, 531 U.S.



159, 121 S.Ct 675, 148 L.Ed. 2d 576 (2001), the Supreme Court held that the Army Corps of Engineers had unlawfully attempted to extend its jurisdiction over “navigable waters” and “the waters of the United States” to an abandoned sand and gravel pit containing wetlands outside Chicago that several municipalities wished to convert to a landfill. The Court held that the statute’s text did not permit the agency to so extend its jurisdiction, notwithstanding that a broad interpretation of the agency’s regulation, 33 C.F.R. §328.3(a)(3), which further defined the term “waters of the United States” might justify such extension. The Court held that 33 C.F.R. §328(a)(3), as clarified and applied to petitioner’s site pursuant to the “Migratory Bird Rule”, exceeded the authority granted to the Corps under Section 404(a) of the Clean Water Act.

The Court had determined previously that the term “navigable waters” could be interpreted to include wetlands that were “inseparably bound up with the ‘waters of the United States.’” United States v. Riverside Bayview Homes, Inc., 474 U.S. 121, 134 (1985). In the Solid Waste Agency case, however, the Court was asked to rule that the jurisdiction of the Corps extends to ponds that are not adjacent to open water, a question specifically reserved in United States v. Riverside Bayview Homes. 121 S.Ct. 675, 680, 148 L.Ed.2d 576, 585 (2001).

The Court determined that the expansive definition of Section 404(a) espoused by the Corps was not supported by statutory language or by the legislative history of the Act. The Court stated as follows:

As counsel for respondents conceded at oral argument, such a ruling would assume that “the use of the word navigable in the statute..does not have any independent significance.” Tr. Of Oral Arg. 28. We cannot agree that Congress’ separate definitional use of the phrase “waters of the United States” constitutes a basis for reading the term “navigable waters” out of the statute. We said in Riverside Bayview Homes that the word “navigable” in the statute was of “limited effect” and went on to hold that §404(a) extended to nonnavigable wetlands adjacent to open waters. But it is one thing to give a word limited effect and quite another to give it no effect whatever. The term “navigable” has at least the import of showing us what Congress has in mind as its authority for enacting the CWA: its traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be made so. See e.g. *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 407-408, 85 L.Ed. 243, 61 S.Ct. 291 (1940).

121 S.Ct. 675, 682-683, 148 L.Ed. 2d 576, 587-588 (2001).

Here, EPA seeks a similar result – to render the limiting language on its jurisdiction under the UIC provisions of the SDWA of no effect whatever, by extending its jurisdiction to all forms of injection, even in the absence of a USDW. The statute at issue is quite clear: “[s]uch program may not include requirements which interfere with or impede (1) the underground injection of brine or other fluids which are brought to the surface in connection with oil or natural gas production or natural gas storage operations...**unless such**

**requirements are essential to assure that underground sources of drinking water will not be endangered by such injection.”** 42 U.S.C. §§300h(b)(2); 300h-1(c). [Emphasis added.] The statute further describes when underground injection will be considered to endanger drinking water sources, “..if such injection may result in the presence in underground water which supplies or can reasonably be expected to supply any public water system of any contaminant...” 42 U.S.C. §300h(d)(2). By asserting that its regulatory jurisdiction extends to all injection, even in the absence of a USDW, the agency attempts to completely negate this express statutory limitation on its authority.

The Court in Solid Waste Agency further stated as follows:

When an administrative interpretation of a statute invokes the outer limits of Congress’ power, we expect a clear indication that Congress intended that result... This requirement stems from our prudential desire not to needlessly reach constitutional issues and our assumption that Congress does not casually authorize administrative agencies to interpret a statute to push the limit of congressional authority.

*Id.* at 683, 148 L.Ed.2d 576,588 (2001). Here the agency is attempting to stretch its regulatory authority to the very limit of Congress’ power over underground injection, with no clear indication that Congress intended that result.

Respondent will no doubt cite Phillips Petroleum Company v. United States E.P.A., 803 F. 2d 545 (10<sup>th</sup> Cir. 1986), but said case does not change the above analysis. Phillips challenged the mechanical integrity test (MIT)

regulations promulgated by EPA for the Osage Mineral Reserve. Phillips argued that existing Bureau of Indian Affairs requirements rendered EPA's MIT regulations not "essential". The lack of USDWs was neither raised nor addressed in Phillips.

**B. 40 C.F.R. §144.16 Relief Cannot Be Wholly Discretionary**

EPA's rationale for regulating well injection where no USDW exists is explained in the preamble to 40 C.F.R. §144.16:

In this regard EPA contemplated excluding such wells entirely from these regulations. However, it is only prudent that as long as an injection facility has some potential to contaminate underground sources of drinking water through lateral displacement, some minimal control should be exercised over it. At a minimum, the Director should have the opportunity to assess the potential for contamination. Thus, wells that do not inject into, through or above [an] underground source of drinking water are still covered by the UIC program, so that they can be inventoried and their potential for endangerment reviewed. However, discretion is given to the Director to determine whether any additional requirements need be applied in particular instances.

45 FR 42474 (June 24, 1980). This contemporaneous construction of the regulation clearly indicates that EPA was aware the regulation of injection wells where no USDW exists was at the very fringes of the agency's reach. However, the drafters were concerned that such injection wells might contaminate a distant USDW by lateral displacement. The solution was to require that they be inventoried and their potential for endangerment be reviewed. The only rational

interpretation of the preamble language is that injection wells where no USDW exists are to be evaluated to determine how much regulation is necessary if there are USDWs close enough to be concerned about, and if a hydraulic connection could exist. Stated otherwise, wells that do not inject into, through or above a USDW must be presumed not to require regulation. The discretion at 40 C.F.R. §144.16 is given to the Administrator to determine whether additional requirements beyond mere inventory need to be applied in particular instances, not whether requirements should be reduced.

The EAB denied review on Region IV EPA's refusal to grant relief under 40 C.F.R. §144.16. They reasoned that said relief is entirely discretionary, but the preamble language indicates otherwise. The EAB erred in not granting review on this issue. Further, the EAB seems to have interpreted the preamble language in a peculiar fashion. In footnote 14, they observe, "If anything, the preamble language reiterates that discretion is given to the Region to determine whether any additional requirements need to be applied in particular instances." (A.R. 114 at 13, Apx. 72.) The EAB seems to be suggesting that absent a USDW, an injection well can be more heavily regulated than otherwise. This is clearly a mistaken interpretation.

Putting the No USDW issue in perspective, the vast majority of injection wells in the United States penetrate one or more aquifers that unquestionably

definitionally qualify as a USDW. Only a tiny number of injection wells could or would be entitled to the relief contemplated at 40 C.F.R. §144.16. Requests for relief under 40 C.F.R. §144.16 could not conceivably disrupt the UIC program or impose an impossible burden as EPA has complained. And in any event, the agency is obligated to review any legitimate requests for relief under 40 C.F.R. §144.16. Phillips does nothing to preclude case-by-case review under 40 C.F.R. §144.16. 803 F.2d 545, 562-563 (10<sup>th</sup> Cir. 1986).

### **No USDW Summary**

The SDWA, the legislative history, the plain language of C.F.R. §144.16, and the preamble language thereto all make it clear that EPA lacks jurisdiction over well injections where no USDW exists. In the alternative, at the very least, EPA must fairly evaluate such well injections under 40 C.F.R. §144.16. EPA's position that it has absolute discretion to fully regulate injection wells with no USDW is unsupportable. The EAB was clearly in error by denying remand on this issue.

## CONCLUSION

For the foregoing reasons, your Petitioner prays that the Court remand these matters, or grant whatever relief to which he may be entitled.

Respectfully Submitted,

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## **REVISED CERTIFICATE OF COMPLIANCE**

Pursuant to FRAP 32(a)(7)(C) and 6 Cir. R. 32, the undersigned certifies that this brief complies with the type-volume limitations of said rules.

1. Exclusive of the exempted portions at FRAP 32(a)(7)(B)(iii), this brief contains 6,550 words.
2. This brief has been prepared in a proportionally spaced typeface using Microsoft Word 2000, in the following font name and size: Times New Roman, 14 point.
3. The undersigned understands that a material misrepresentation in completing this certificate, or a circumvention of the type-volume limitations in FRAP 32 may result in the Court's striking the brief and imposing sanctions against the person signing the brief.

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Syd H. Levine

## **CERTIFICATE OF SERVICE**

I hereby certify that on September 7, 2001, two copies of the foregoing were served by first class mail, postage paid, on the following counsel of record:

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Syd H. Levine



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(no exhibits) (A.R. 98) 4-21-98
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7. Region IV letter to Syd H. Levine, et al. from Beverly Bannister  
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8. AnaLog Web Page Printout, “Annulus Gel” (A.R. 122) undated
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undated
12. The United States’ Memorandum on Penalties and Injunctive Relief in  
United States v. Syd H. Levine & Associates, et al., C.A. No. 4:97CV-  
169M.
13. Partial transcript of the deposition of Syd H. Levine in United States v.  
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