

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 8

2012 DEC 14 PM 2: 53

IN THE MATTER OF:

Maralex Disposal, LLC.,

Respondent.

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Docket No. SDWA-08-2011-0079

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HEARING CLERK

COMPLAINANT'S INITIAL POST-HEARING BRIEF

Complainant, the United States Environmental Protection Agency (Complainant, EPA or the Agency) respectfully submits its Initial Post-Hearing Brief setting forth proposed findings of fact, conclusions of law and order pursuant to the Presiding Officer's Briefing Schedule dated October 30, 2012 and 40 C.F.R. § 22.26.

TABLE OF CONTENTS

I. QUESTIONS PRESENTED	1
II. WELL DESCRIPTION	1
III. BACKGROUND	4
A. Authority	4
1. Statute	4
2. Regulations	5
3. Permit	5
B. Procedure	7
IV. STATEMENT OF THE CASE	8
V. ARGUMENT	12
A. EPA Having Satisfied its Burden of Proof Should Prevail on Liability that Respondent Failed to Maintain Mechanical Integrity; Failed to Observe Weekly Annulus Pressure and Inaccurately Reported Annulus Pressures in Its 2010 Annual Monitoring Report as Alleged in the Complaint. 12	
1. EPA Proved the Elements of its Prima Facie Case of SDWA Liability Against Respondent	12
2. Respondent Admitted to or Stipulated to the Inaccurate Reporting and Failure to Observe Weekly Annulus Pressure Violations	14
3. Complainant Proved By a Preponderance of the Evidence that the Well Lost Mechanical Integrity as Alleged in the Complaint.....	16
a. The Legal Standard.....	16
b. The Evidence	17
B. Respondent Failed to Properly Defend Against the Mechanical Integrity Allegation and to Assert Any Affirmative Defenses	21
C. EPA Proved by a Preponderance of Evidence the Overall Appropriateness of the Penalty.....	23
1. The Proposed Penalty of \$111,650 was Calculated in Accordance with the Statutory Penalty Criteria Set Forth in SDWA § 1423()(4)(B) and EPA Penalty Policies	25
a. Penalty Calculation for Loss of Mechanical Integrity	25
i. Gravity Component	25
ii. Economic Benefit Component	29
iii. Adjustment Component	30

b. Penalty Calculation for Failure to Observe Weekly Annulus Pressure.....	30
i. Gravity Component	30
ii. Economic Benefit Component	31
iii. Adjustment Component	31
c. Penalty Calculation for Inaccurate Reporting	31
i. Gravity Component	31
ii. Economic Benefit Component	32
iii. Adjustment Component	32
2. Respondent Failed to Adequately Respond to the Relief Requested.....	32
VI. CONCLUSION	35

I. QUESTIONS PRESENTED

- A. Whether the EPA established by a preponderance of the evidence that Respondent failed to maintain mechanical integrity; failed to observe weekly annulus pressure and inaccurately reported annulus pressures in its 2010 annual monitoring report in violation of its underground injection control (UIC) permit and the Safe Drinking Water Act (SDWA) as alleged in the Complaint when Respondent admitted to or stipulated to two of the violations and Complainant met its burdens of presentation and persuasion that the well lost mechanical integrity according to the permit?
- B. Whether Respondent failed to properly defend against the mechanical integrity allegation absent presenting an adequate and relevant defense and/or asserting any affirmative defenses?
- C. Whether EPA's proposed penalty of \$111,650 calculated in accordance with the statutory factors at SDWA § 1423(c)(4)(B) and the applicable Agency penalty guidances is fair and appropriate?

II. WELL DESCRIPTION

Maralex owns and operates the Dara Ferguson #1 Class II disposal well (well) located within the exterior boundaries of the Southern Ute Indian Reservation, just north of the state divide between New Mexico and Colorado. Tr. 26. Local oil and gas producers pay Maralex to dispose of waste fluids consisting of produced water brought to the surface in connection with oil and gas production. Stip. Ex. 33. The waste fluids typically contain high concentrations of saline produced water, benzene, toluene, ethylbenzene, and xylene. Tr 27-28. Over 60,000 barrels (or more than 2.5 million gallons) of waste fluids are injected into the well monthly at its surface and ultimately disposed of approximately 9,000 feet underground in a designated injection zone.

Class II injection wells are defined at 40 C.F.R. §§ 144.6(b) and 146.5(b). This category includes wells which dispose of fluids that have been brought to the surface in connection with oil and/or natural gas production. In addition, Class II wells include wells used for enhanced recovery of

oil and for storage of hydrocarbons. Tr. 22. The Maralex well is a large capacity disposal well compared to other Class II injection wells in terms of the volume it injects. Tr. 29; Stip. Ex. 33.

The well operates subject to an EPA-issued UIC permit (permit). The Statement of Basis accompanying the permit and providing site-specific conditions identifies a minimum of six and possibly eight underground sources of drinking water (USDWs) in the subsurface vicinity of the well. Stip. Ex. 33. According to the Safe Drinking Water Information System database, seven public water systems using groundwater for human consumption are located in proximity to the well, the closest of which is a mile and a half away. Tr. 30; Stip. Exs. 32, 33.

The subsurface length of the well is approximately 9,000 feet. It passes through a number of different geologic formations, some of which contain aquifers defined as USDWs; the deepest of which is 5,000 feet below the surface. Tr. 34-35. The well itself is comprised of three concentric casings (or strings). The outermost casing was installed to a depth of approximately 737 feet. Tr. 32; Compl. Ex. 2(A)2-W. Inside that casing is a narrower casing placed at a depth of approximately 3,600 feet. The third and final casing fits inside the middle casing and is drilled to a depth of almost 9,000 feet. Tr. 32; Compl. Ex. 2(A)2-W. This innermost casing passes through the USDW located at approximately 5,000 feet depth without the benefit of extra casings which are set above this depth. The steel tubing (also known as injection tubing) that the waste fluids are injected into is housed inside the most inner casing. Tr., 32- 33. The space between the injection tubing and the innermost casing (the annulus, tubing-casing annulus or TCA) is sealed off at the bottom by a packer. Tr. 33; Compl. Ex. 2(A)2-W. The injection tubing passes through the packer and ultimately injects the waste fluids into the injection zone through perforations at the bottom of the well. Tr. 34, L 5-10; Stip. Ex. 31; Compl. Ex. 2(A)2-W.

The annulus is designed as a fail-safe leak detection system. Tr. 35. It serves as secondary containment and also performs the critical role of notifying the surface operator through pressure

increases if the injected waste has leaked from the injection tubing or is “communicating” with the annulus, packer, casing wall or wellhead. Tr. 35-36. Whereas the pressure in the injection tubing currently is permitted at 2,000 psi to force the waste fluids down the tubing into the injection zone, the permit requires that Respondent maintain the annulus pressure at zero or “0.” Tr. 34. When the annulus is under pressure, it loses its ability to notify the surface operator about communication into or out of the annulus, nullifying its fail-safe function.

III. BACKGROUND

A. Authority

1. Statute

Pursuant to section 1422 of the SDWA, 42 U.S.C. § 300h-1; and 40 C.F.R. part 147, subpart G, § 147.300, EPA regulates and administers the UIC program for Class II wells in Indian country as defined at 18 U.S.C. § 1151, (70 Fed. Reg. 46173 (August 9, 2005)), within the State of Colorado. Tr. 22. The effective date of the program is April 2, 1994. The UIC program requirements are located at 40 C.F.R. parts 124, 144, 146, 147, and 148. EPA has not authorized Colorado to implement the UIC program in Indian country, including the Southern Ute Indian Reservation. Furthermore, the Southern Ute Indian Tribe has not received authority to enforce the UIC program. EPA has the authority to enforce the requirements of the UIC program found at 40 C.F.R. parts 124, 144, 146, 147, and 148.

Section 1423(a)(2), 42 U.S.C. 300h-2(a)(2), authorizes the Administrator to issue an order under subsection (c) requiring any person subject to any requirement of any applicable UIC program found violating such requirement to comply during a period which a State (or Tribe) does not have primary enforcement responsibility for underground water sources. Violations of both UIC permits and the regulations constitute violations of the SDWA.

Section 1423(c)(2), 42 U.S.C. 300h-2(c)(2), authorizes the Administrator to issue an order following opportunity for a hearing and public notice either assessing a civil penalty of not more than

\$5,000 for each day of violation for any past or current violation, up to a maximum administrative penalty of \$125,000, or requiring compliance with such regulation or other requirement or both. The amount for violations occurring after January 12, 2009, has been increased to \$7,500 per day up to \$177,500. (See 40 C.F.R. part 19.)

2. Regulations

Mandatory, non site-specific general permit requirements are set forth in the UIC regulations and apply in addition to individual UIC permit conditions. Stip. Ex. 33. The UIC program requirements governing mechanical integrity, reporting and monitoring are located at 40 C.F.R. parts 124, 144, 146, 147 and 148.

3. Permit

The purpose of a UIC permit is to ensure that waste injection into a disposal well does not harm USDWs. Tr. 24. Class II wells under the jurisdiction of the EPA must be authorized by an EPA-issued permit unless authorized by rule. UIC permits specify the conditions and requirements for construction, operation, monitoring, and reporting and plugging of injection wells to prevent the movement of fluids into USDWs. Tr. 24, 38; Stip. Exs. 2, 33. The permit, issued for the life of the well, is the controlling document for the well's operation. Tr. 23.

The EPA issued Respondent permit no. CO21011-06908 to operate the well on May 22, 2006, based on Respondent's permit application and demonstration that it met the permit standards. (Tr. 37, L 14-23; Stip. Ex. 2) The permit's reporting requirements are set forth in Part II(D) and include, but are not limited to, monitoring according to the parameters and frequency set forth in Appendix D and submitting an annual report summarizing the monitoring results. Tr. 121; Stip. Ex. 2. Appendix D specifies that annulus pressure shall be observed weekly and recorded at least once every thirty days.

Tr. 121; Stip. Ex. 2. Appendix D further requires, in part, that each month's maximum and averaged annulus pressures be reported annually. Tr. 121; Stip. Ex. 2.

The permit at Part II(B) requires Respondent to maintain and ensure mechanical integrity, a critical component for protecting USDWs. Tr. 85– 86; Stip. Ex. 2. Mechanical integrity refers to the condition of the well and an operator must ensure that the well has no significant leak into or out of its annular space and no significant leak through vertical channels adjacent to the outside of the casing into USDWs. Tr. 38-39.

Part II(C)(6) of the permit requires that the annulus be maintained at “0” pounds per square inch (psi). (Tr. 38, 86; Stip. Ex. 2). If the annulus pressure cannot be maintained at “0” psi, Part II (C)(6) of the permit requires the permittee to follow the procedures in Ground Water Section Guidance No. 35 “Procedures to follow when excessive annular pressure is observed on a well.” Tr. 86; Stip. Exs. 2, 34. Mr. Wisner testified that, “[t]he purpose of the Guidance is to follow procedures to determine whether it might be thermally induced pressure.” Tr. 47. Ms. Roberts reiterated that, “the Guidance is designed to determine whether the reason for annulus pressure may be because of the heating of this closed annulus ... And if it's not the cause of the annulus pressure, then the Guidance directs the Permittee to follow procedures for a loss of mechanical integrity. Loss of mechanical integrity is covered in the permit at Part II(B)(4).” Tr. 86-87.

Part II(B)(4) of the permit, “Loss of Mechanical Integrity,” further specifies “if the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity becomes evident during operation (such as presence of pressure in the TCA, water flowing at the surface, etc...), the Permittee shall further notify the Director within 24 hours ... and the well shall be shut-in within 48 hours unless the Director requires immediate shut-in. Tr. 39-40, 86; Stip. Exs. 2, 34.

B. Procedure

The EPA filed a Proposed Penalty Complaint and Notice of Opportunity for Hearing against Respondent Maralex Disposal, LLC (Respondent or Maralex) on September 27, 2011, pursuant to SDWA § 1423, 42 U.S.C. § 300h-2, and the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits (Consolidated Rules of Practice), 40 C.F.R. Part 22. The Complaint alleges that Respondent violated its UIC permit, the applicable regulations and SDWA section 1423, 42 U.S.C. § 300h-2, by failing to maintain mechanical integrity at the well, failing to observe weekly annulus pressure, and inaccurately reporting the well's monthly annulus pressure in its 2010 annual monitoring report. The Complaint proposed a total civil penalty of \$111,670 based on the alleged violations.

On October 28, 2011, Respondent filed an Answer to Proposed Penalty Complaint and Request for Hearing (Answer). In its Answer, Respondent admitted many of the essential allegations set forth in the Complaint. Ans. ¶¶ 1-5. Respondent did not assert any affirmative defenses. Id.

In response to a Scheduling Order issued by the Presiding Officer on December 28, 2011, Complainant filed its Prehearing Exchange on February 15, 2012. Respondent filed its Prehearing Exchange on February 28, 2012. Complainant filed an Unopposed Motion for Extension of Time to File Complainant's Supplemental Prehearing Exchange on June 22, 2012. On July 3, 2012, pursuant to the Presiding Officer's Order Granting Extension of Time to File Complainant's Supplemental Prehearing Exchange, Complainant filed its Supplemental Prehearing Exchange. The Presiding Officer issued a Pretrial Order on July 19, 2012, scheduling a hearing to be held in Durango, Colorado, beginning October 10, 2012. On behalf of both parties, Complainant filed an Unopposed Motion for Extension of Time to File Stipulations on August 13, 2012; the Presiding Officer granted the motion the following day. The parties filed a set of Stipulations of Facts, Exhibits and Testimony on August 20, 2012,

wherein Respondent stipulated to the majority of the elements of Complainant's case-in-chief and admitted to the inaccurate reporting and failure to observe weekly annulus pressure violations. Stip. of Facts.

An administrative hearing was held before the Presiding Officer, the Honorable Elyana R. Sutin, in Durango, Colorado on October 10, 2012. The parties stipulated to 38 exhibits, of which 26 were introduced by Complainant. Complainant admitted into evidence one demonstrative exhibit and testimony from three witnesses including Mr. Wisner who testified as an expert witness on UIC program, its purpose, implementation and regulation, including permit compliance. Tr. 19.

The Presiding Officer issued a Briefing Schedule on October 30, 2012. On November 15, 2012, Complainant filed a Motion to Conform Transcript pursuant to 40 C.F.R. 22.25. On November 20, 2012, the parties filed a Joint Motion for Extension of Time to File Post-Hearing Brief. The following day the presiding officer granted the motion, extending the deadline for filing post hearing briefs until December 14, 2012.

IV. STATEMENT OF THE CASE

EPA has alleged that Respondent is liable for three violations of its UIC permit, the UIC program and SDWA. Specifically, EPA alleges that Respondent: (1) failed to maintain mechanical integrity; (2) failed to observe weekly annulus pressure measurements; and (3) inaccurately reported the well's monthly maximum and average annulus pressures in its 2010 annual monitoring report. Respondent conceded liability as to the failure to observe weekly annulus pressure and inaccurate reporting violations but denies the mechanical integrity violation and the appropriateness of the overall penalty. Respondent argues that the well did not lose mechanical integrity. Respondent dismisses the tubing leaks and loose tubing connections as evidencing loss of mechanical integrity on the basis that they were allegedly small and intermittent in nature.

Complainant maintains that Respondent lost mechanical integrity consistent with and according to its UIC permit. In addition to the permit defining mechanical integrity as ensuring there is no release, the permit considers the loss of mechanical integrity, meaning the point at which the well is no longer sound, to exist when the annulus has significant pressure. The Respondent, after recurring instances of excess annulus pressure, self-identified leaks in the tubing and loose tubing connections through which fluid transferred into or out of the annulus indicating that the annulus was compromised and could no longer serve its fail-safe role. Tr. 172.

EPA observed pressure on the annulus indicating a possible loss of mechanical integrity during a routine inspection on May 5, 2010. Tr. 40-41; Stip. Ex. 8. The pressure gauge measured annulus pressure at 1,725 psi. The amount of annulus pressure was significant in that it measured well in excess of the "0" annulus pressure limit and close to the well's current maximum allowable injection pressure of 2,000 psi. Tr. 41. Mr. Wiser, EPA UIC inspector, discussed the pressure and its possible source with the well operator Dennis Reimers during the inspection. Consistent with the processes set forth in the permit and Guidance 35 for determining whether excess annulus pressure is caused by a thermal fluctuation or loss of mechanical integrity, they discussed opening the valve to the annulus at the wellhead to allow the pressure to escape or "bleed off." Tr. 41-42, Stip. Exs. 8, 34. As discussed previously, the permit refers the permittee to Guidance 35 if pressure is above "0" and cannot be maintained at "0". Tr. 47; Stip. Exs. 2, 34. The following day, May 6, 2010, Mr. Reimers informed Mr. Wiser that approximately 42 gallons had been bled off the annulus valve and pressure restored at "0". Tr. 42.

Mr. Wiser reinspected the well less than three weeks later on May 26, 2010. According to Mr. Wiser, he again observed significant annulus pressure, this time at 1,840 psi. Tr. 43; Stip. Ex. 9. After reviewing the permit, including the requirement for maintaining mechanical integrity, Mr. Wiser "identified the fact that it had been far in excess of "0" pounds, nearly approaching the injection

pressure, that that was a violation of the permit condition and wrote a letter that contained that statement, that allegation of violation for failure to maintain pressure at zero.” Tr. 44. Complainant issued the letter, a Notice of Violation (NOV), on June 7, 2010, notifying Respondent “that it might be a loss of mechanical integrity,” but allowing for the possibility that the pressure might be induced from thermal heating. Tr. 45; Stip. Exs. 10.

Respondent concluded that that the excessive annulus pressure was caused by a leak rather than thermal fluctuation in a letter to EPA dated July 6, 2010. Mr. Wisner testified that, “Maralex authored a letter dated July 6, 2010, and wrote back to EPA and described that they, too, had noted that the well had had annulus pressure. They had initially thought it was related to thermal effects . . . but owing to the nature of how fast the pressure was recurring in the annular space, that they now believed it was a leak.” Tr. 45; Stip. Ex. 11. Respondent outlined in the letter a plan for repairing the well. According to Mr. Wisner, “they laid out a series of steps starting with shutting down the well and lowering a plug into the tubing of the well and placing that plug in the bottom and performing a series of different pressure tests on components of the well to determine which component of the well was leaking.” Tr. 46. This work was scheduled for August 2010, and Respondent committed to keep EPA apprised of the activities and results. Tr. 46.

Nothing further happened to repair the well or test its mechanical integrity until the spring of the following year, during which time Respondent continued to operate the well. Tr. 95-96; Stip. Exs. 2, 34. In early 2011, EPA Region UIC Program employee Sarah Roberts received phone calls from the La Plata County Engineer’s Office and the San Juan Citizens Alliance expressing concern that the well continued to operate despite the noncompliance observed the previous year. Tr. 81-82. Ms. Roberts, assuming responsibility for the case, conducted a review of the well file, including the permit; applicable regulatory requirements; May 2010 inspection report; June 7, 2010 NOV; July 6, 2010 letter from

Respondent; and the 2010 annual monitoring report. Tr. 83. She concluded based on her file review that the well had lost mechanical integrity according to the permit. Tr. 87.

Ms. Roberts visited the well on April 13, 2011, under the impression from Respondent's July 6, 2010 correspondence and accompanying repair plan that the well was not active and that Respondent was taking steps to identify and repair the leak. Tr. 87-89; Stip. Ex. 13. She observed instead that the well was operating. Tr. 89. The annulus pressure at the time of Ms. Roberts' visit measured approximately 1,670 psi, indicating a continued lack of mechanical integrity. Tr. 89-90. According to Ms. Roberts, "the pressure on the annulus had nearly equalized with the pressure on the injection string...For a tubing leak, at the annulus could not be higher than the injection pressure, and it was only 80 pounds below it." Tr. 89. Ms. Roberts further stated that "Additionally, Guidance 35 states that excessive annulus pressure is to be considered at 100 psi or 10% of the injection pressure. And at that time of the inspection, the annulus pressure was over 95% of the injection pressure." Tr. 89-90.

EPA issued a second NOV on April 19, 2011, following the inspection and file review, citing the failure to maintain mechanical integrity violation in addition to failing to observe weekly annulus pressuring and inaccurate reporting of the annulus pressure in the 2010 annual monitoring report. Tr. 91; Stip. Ex. 15. According to Ms. Roberts, "this Notice reiterated the permit requirements associated with the failure to maintain mechanical integrity violation. Tr. 91. It also reiterated the requirements in the permit at Part 2(B)(2), which are to shut in the well and to not resume injection until mechanical integrity is shown to be restored and written authorization has been received from EPA." Tr. 92.

Ms. Roberts phoned Mr. Reimers on May 3, 2011, to ensure that the well was not injecting. Stip. Ex. 16. Ms. Roberts testified that, "Mr. Reimers stated that the well had been shut in, and he also informed me that the same plans that were outlined in the July 6, 2010 letter would be the steps that Maralex would use to address the loss of mechanical integrity." Tr. 93. Mr. Reimers told Ms. Roberts

during the phone conversation that the temperature log “may indicate that some of the fluid was moving back up through the packer into the tubing casing annulus.” Tr. 94. Ms. Roberts confirmed that “if fluid does move through the packer to the tubing casing annulus, that constitutes a leak and a loss of mechanical integrity.” Tr. 94.

Respondent repaired the leak in the tubing later that month. Tr. 95; Stip. Ex. 17. Subsequently, the well passed a mechanical integrity test on May 24, 2011. Tr. 95. Shortly thereafter, EPA issued Respondent permission to resume injecting. Tr. 96.

V. ARGUMENT

A. EPA HAVING SATISFIED ITS BURDEN OF PROOF SHOULD PREVAIL ON LIABILITY THAT RESPONDENT FAILED TO MAINTAIN MECHANICAL INTEGRITY; FAILED TO OBSERVE WEEKLY ANNULUS PRESSURE AND INACCURATELY REPORTED ANNULUS PRESSURES IN ITS 2010 ANNUAL MONITORING REPORT AS ALLEGED IN THE COMPLAINT.

1. EPA Proved the Elements of its Prima Facie Case of SDWA Liability against Respondent

Pursuant to the Environmental Appeals Board's decision in *J.V. Peters and Company et seq*, RCRA (3008) Appeal No. 95-2 (April 14, 1997), EPA is required to allege facts sufficient to establish each element of the violation to be charged and support each element with evidence to establish its *prima facie* case. Section 22.24(a) of the Consolidated Rules of Practice provides that Complainant has the burdens of presentation and persuasion to prove the elements of a *prima facie* case. 40 C.F.R. § 22.24(a). The elements of Complainant's *prima facie* case and accompanying exhibits and/or testimony set forth below clearly demonstrate that Complainant surpassed its burden of proving by a preponderance of the evidence liability and the appropriateness of the total penalty.

- a) Respondent is a person who owns or operates a Class II UIC injection well in Indian country;

Stip. of Facts 1, 2, 3, 4; Ans. ¶¶ 10, 11, 12

- b) Respondent is authorized to operate the Dara Ferguson well by EPA permit # CO21011-06908 and is subject to the requirements set forth in the applicable UIC permit, program and SDWA at all times;

Stip. of Facts 2, 5, 6 ; Ans. ¶¶ 9, 13

- c) Respondent was unable to maintain mechanical integrity at all times and could not ensure there were no significant leaks in the casing, tubing or packer; and no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection well bore, as required by Part II(B) of the permit.

Stip. Ex. 2; Tr. 85-86, 89-90, 152-153

- d) Respondent was unable to maintain annulus pressure at “0” as required by Appendix D of the permit.

Tr. 44-45, 86, 90; Stip. Ex. 2; Stip. of Facts 11, 12, 13, 14, 15, 16

- e) Respondent failed to follow the shut down procedures caused by a loss of mechanical integrity in pursuant to the Permit at Part II(B)(2) upon determining that the excessive annular pressure was related to a leak rather than a thermal fluctuation.

Tr. 85-87; Stip. Ex. 2

- f) A loss of mechanical integrity became evident during operation due to the presence of pressure in the TCA according to Part II(C)(6) of the permit, Guidance 35 and the regulations. Part II(B)(2) required Respondent to take a set of steps to notify EPA within 24 hours, shut-in the well within 48 hours, and keep the well shut-in until mechanical integrity is restored and they have written notification from EPA to resume injection.

Tr. 85-87; Stip. Ex. 2.

- g) Respondent failed to observe weekly measurements of the well’s annulus pressure as required by Part II(D)(I) of the permit;

Tr. 90; Stip. of Facts 7, 8, 9; Ans. ¶¶ 15, 16

- h) Respondent inaccurately reported the well’s annulus pressure in its 2010 annual monitoring report required by Appendix D of the permit by reporting each month’s maximum and averaged annulus pressures at “0” when EPA had observed and Maralex confirmed the existence of annulus pressure on the well between May 2010 through May 2011.

Tr. 81, 85, 88; Stip. Ex. 2; Stip. of Facts 18, 19, 20; Ans. ¶¶ 21, 22

2. Respondent Admitted to or Stipulated to the Inaccurate Reporting and Failure to Observe Weekly Annulus Pressure Violations

Respondent admits to inaccurately reporting the monthly annulus pressure in its 2010 annual monitoring report and failing to observe weekly annulus pressure measurements. Tr. 88; Stip. of Facts 7, 8, 16, 17, 18, 19, 20. The permit's reporting requirements are set forth in Part II(D) and include, but are not limited to, monitoring according to the parameters and frequency set forth in Appendix D and submitting an annual report summarizing the monitoring results. Tr. 111; Stip. Ex. 2.

The permit at Appendix D specifies that annulus pressure shall be observed weekly and recorded at least once every thirty days. Tr. 111; Stip. Ex. 2. Complainant alleged that “[w]eekly measurements of annulus pressure is required for the Ferguson #1 well by the permit at Part II(D)(1)” and that “Respondent violated the permit and therefore the Act by failing to take weekly annulus pressure measurements of the Ferguson #1 well.” Comp. ¶¶16, 17. Respondent, while taking exception to Complainant using the term “take” in the Complaint and arguing instead that the duty is to “observe,” nonetheless acknowledges that it failed to comply.¹ Stip. of Facts 7, 8; Ans. ¶15. Maralex admits in its Answer, and has since stipulated to, not making consistent weekly observation of the annulus pressure in violation of the permit. Ans. ¶16.

Ms. Roberts testified that during a conversation she had on April 13, 2011 with Mr. Pete Tree, former Maralex pumper, and Ms. Christi Reid of Maralex regarding the frequency Respondent inspected or observed the annulus pressure, “Mr. Tree stated that the last time he had observed it was the last time EPA was inspecting” which was approximately 11 months earlier. Tr. 90. In response to Ms. Roberts asking how often is the annulus observed, Mr. Tree estimated that it had been six to eight months. Tr. 90. Ms. Roberts said, “I asked Ms. Reid if that sounded accurate and she stated that it did.” Tr. 91; Stip.

¹ Respondent's objection to the allegation in the Complaint that it “failed to take weekly annulus pressure measurements” is nonsensical as the only way to “observe” annulus pressure is to take a pressure reading at the wellhead. One of the monitoring methods set forth in the permit is measuring pressure in pounds psi. Part II(D)(2)(d). Stip. Ex. 2.

Ex. 13. Respondent explains in its Answer that it observed the annual pressure several times per month and, on some occasions, several times per week. Ans. ¶16. This loose interpretation and implementation of the permit requirements does not constitute a valid defense. To date, Respondent has not provided any annulus pressure records. Any monitoring frequency of the annulus pressure other than weekly constitutes permit noncompliance and a violation of the SDWA.

Additionally, Respondent stipulated to reporting incorrectly the annulus pressure in its 2010 report. Ans. ¶22; Stip. of Facts, 20. Appendix D of the permit requires, in part, that each month's maximum and averaged annulus pressure be reported annually. Stip. Ex. 2. Ms. Roberts testified that upon reviewing the annual monitoring report for 2010, she noted the monthly reporting of "0" psi not to be true based on correspondence with Maralex and EPA's inspections. Tr. 85. The Complaint alleges that despite Respondent observing and showing EPA annulus pressure above "0" during EPA's inspections May 2010 through May 2011, Respondent inaccurately self-reported the minimum and maximum annulus pressures for every month in 2010 as "0" in violation of the permit and the SDWA. Tr. 85; Comp. ¶21; Stip. of Facts, 18.

In its Answer, while admitting the underlying facts, Respondent denies the alleged violation by claiming that "although the reporting of the annulus pressure in the 2010 report was incorrect, there is no requirement to make any report of these pressures. The EPA was aware during 2010 the annulus pressures were more than zero. Thus, there was no incentive to mislead the EPA regarding the pressures." Ans. ¶22. Respondent is mistaken on two counts. First, Appendix D of the permit clearly requires Respondent to report on an annual basis its monthly minimum and maximum annulus pressure. While Respondent has the option of which form to use, the reporting obligation is not discretionary. Second, the annual monitoring reports are critical to keep the operator and EPA informed of the well's health and UIC compliance. EPA would have had no independent basis for evaluating the well's annulus pressure but for EPA having scheduled an inspection in 2010. The last time EPA inspected the

well was in 2008. During periods between inspections, the EPA relies solely upon information reported by Respondent. Respondent ultimately conceded the violation in its Answer and subsequent Stipulations. Ans. ¶21.

3. Complainant Proved By a Preponderance of the Evidence that the Well Lost Mechanical Integrity as Alleged in the Complaint

The Complaint alleges that the well failed to maintain mechanical integrity in violation of Part II(C)(6) of its permit and the general mechanical integrity requirements set forth at 40 C.F.R. § 144.51(q)(1) between May 5, 2010, and May 24, 2011, based on several findings that the well had significant annulus pressure and was unable to maintain the “0” pressure limit. Comp. ¶20. Based on the applicable legal standard of proving its burdens of presentation and persuasion by a preponderance of the evidence, Complainant surpassed its burden of proof in establishing that the mechanical integrity violation alleged in the Complaint occurred.

a. The Legal Standard

40 C.F.R. § 22.24(a) of the Consolidated Rules of Practice requires that Complainant has the burdens of presentation and persuasion that the violation occurred as set forth in the Complaint. The standard by which Complainant must satisfy its burden of proof is by a preponderance of the evidence, or a showing that it is more likely than not that the violations occurred. The administrative tribunal *In the Matter of Aguakem Caribe, Inc* previously held that a party prevailed under this standard by demonstrating that the facts the party seeks to establish are more likely than not to be true. *In the Matter of Aguakem Caribe, Inc.*, Docket No. RCRA-02-2009-7110, 2011 EPA ALJ LEXIS 24 (December 22, 2011). The Environmental Appeals Board in *Smith Farms Enterprises, LLC* held “a factual determination meets the preponderance of the evidence standard if the fact finder concludes that it is more likely than not. *Smith Farms Enterprises, LLC*, CWA Appeal No. 08-02, EPA App. LEXIS 10, *14 (EAB Mar. 16, 2011), citing *Julies’ Limousine & Coachworks, Inc.*, 11 E.A.D. 498, 507, n. 20 (EAB 2004); *Lyon County Landfill*, 10 E.A.D. 416, 427, n. 10 (EAB 2002), *aff’d*, No. Civ-02-907, 2004

WL 1278523 (D. Minn. June 7, 2004), *aff'd* 406 F.3d 981 (8th Cir. 2005). Complainant surpassed this burden in the instant matter by presenting a case-in-chief comprised of a sundry of exhibits and testimony, many of which Respondent stipulated to, clearly demonstrating the well lost mechanical integrity according to the permit.

b. The Evidence

As previously discussed, the permit is the controlling document for the well's operation. The permit and UIC program regulations define mechanical integrity to include internal leaks in a well (leaks in the tubing or packer). Stip. Ex. 2. See also, 40 C.F.R. § 146.8. Part II(B) requires the permittee establish and maintain mechanical integrity at all times. Tr. 85; Stip. Ex. 2. Part II(B)(2) states that if loss of mechanical integrity becomes evident during operation, *such as presence of pressure on the annulus* (emphasis added), the permittee is required to notify EPA and shut-in the well until it is repaired. Tr. 86; Stip. Ex. 2. The permit at Appendix D sets the annulus pressure to be maintained at "0" psi. Tr. 86; Stip. Ex. 2. If it is not possible to maintain the annulus at "0", the permittee is required to follow the procedures outlined in Guidance 35. Tr. 86; Stip. Ex. 2. As Mr. Wisner testified, Guidance 35 is provided as a resource guide and tool incorporated into the permit. Tr. 39, 74. Ms. Roberts stated, "Guidance 35 offers procedures for determining if annulus pressure is caused by thermal fluctuation". Tr. 87. Only two options for not maintaining annulus pressure at "0" are recognized by the permit and Guidance 35: a thermal fluctuation inside the annulus or a leak. Tr. 86. When asked whether Guidance 35 offers a third option for pressure in the tubing casing annulus, Ms. Roberts replied, "no." Tr. 87.

The term thermal fluctuation refers to changes in temperature along the length of the well that can induce pressure by causing by the annular liquids to heat and expand, shown by surface pressure observed at the wellhead. Tr. 36. Since the annulus is a closed space, it is possible for a thermal fluctuation to occur after the annulus is filled with fresh water treated with a corrosion inhibitor and then sealed. This fluid may initially expand when heated, requiring that a certain amount be bled off until the

contained fluid amount adjusts to the down hole temperature. Once a balance between fluid amount and temperature is achieved, no further temperature fluctuations will result in pressure building in the tubing-casing annulus. Tr. 36, 39, 41, 45; Stip. Ex. 10. Thus, recurring pressure on the annulus over a period of time indicates the problem is caused by leak, rather than thermal fluctuation.

EPA initially sought to assist Respondent with determining whether the significant annulus pressure observed on May 5, 2010, was the result of a thermal fluctuation. The record is replete with instances dating back to 2008 where the annulus was repeatedly bled off due to recurring pressure. Tr. 145, 147. While the well's inability to maintain "0" pressure was an indicator of a possible loss of mechanical integrity, EPA did not make this determination until Respondent self-reported to the EPA in its July 6, 2010 report that they believed the annulus pressure to be caused by a small leak. Mr. Wisner explained it this way:

Maralex authored a letter dated July 6, 2010, and wrote back to EPA and described that they, too, had noted that the well had had annulus pressure. They had initially thought it was related to thermal effects . . . but owing to the nature of how fast the pressure was recurring in the annular space, that they now believed it was a leak.

Tr. 45; Stip. Ex. 11.

Respondent does not contest that the tubing had one or more leaks. On direct testimony, Mr. Reimers detailed why Respondent suspected and ultimately confirmed a leak. Tr. 153. Respondent readily admits that they found during the 2011 workover loose tubing connections that they believed had allowed communication into the well's annulus. Tr. 172. Mr. Reimers, describing a conversation he had with co-engineer Christ Reid regarding the 2011 repair, testified, "[o]n that particular workover, she discovered two or three joints that were loose on that, and it appeared they were the source of the pressure communication between the 3-1/2 and the 7-inch." Tr. 156. Mr. Reimers testified, "In November of that year when Christi was on vacation, we observed then that we were seeing some effects on that annulus that scared us... We were concerned that that may be the source of that pinhole leak." Tr. 157. Mr. Reimers, opining on what he believed to be the source of the annulus pressure,

admitted, “Early in the life of the well, as we saw the workover, we knew that we had tubing connections that quite possibly could be leaking, and they could be intermittent leaks. The connection is not tight. We know it was not up to the API specs on what the torque should be on that.” Tr. 159.

Ms. Reid confirmed the tubing leaks and loose connections. In describing the May 2011 workover on the well, she testified, “When we finally got the rig out there, we ran plugs in our tubing to isolate the well so that we could pull the tubing out and –well, first we tested the tubing, and it looked like we had a pinhole leak in our tubing. So then we pulled the tubing with a rig to check for the hole.” Tr. 172. She went on to describe in terms of her findings, “We found two very loose connections, so we tightened those up and retested the tubing, and it tested fine. So we assumed that we had been leaking through those loose connections.” Tr. 172. With regard to the loose connections, Ms. Reid explained “[t]hey were very loose. Usually it takes some force to unscrew the pipe, and those connections were— they were loose, like it didn’t take very much force at all with the tongs on the rig to unscrew them.” Tr. 173.

What Respondent denies and this case turns on is Complainant’s assertion that the tubing leaks and recurring annulus pressure evidence a loss of mechanical integrity. As demonstrated throughout, Respondent does not dispute the majority of the facts underlying the mechanical integrity violation. Respondent argues, however, that the leaks were small and intermittent and thus of no significance. Respondent devotes considerable attention and testimony to characterizing the leaks as “pinhole” and/or “intermittent.” The fatal flaw in Respondent’s argument is thinking that the size and frequency of the leaks and loose connections matter for purposes of determining a loss of mechanical integrity as opposed to understanding that the permit, by its terms in addition to Guidance 35, instructs that the well was considered to have lost mechanical integrity when the cause of the annulus pressure was determined to be from a leak. The size and/or intermittent frequency of the leaks are irrelevant. According to the conditions of the permit, a leak that causes significant pressure on the tubing-casing annulus is to be

considered a loss of mechanical integrity. The leak(s) in Respondent's well caused pressure approaching the maximum allowable injection pressure to consistently build on the tubing-casing annulus. Respondent's interpretation of significant is discordant with the permit and is not protective of USDWs.

Responding to a question concerning the significance of the annulus pressure during EPA's April 13, 2011 site visit, Ms. Roberts summarized:

The pressure on the annulus had nearly equalized with the pressure on the injection stream, on the tubing. For a tubing leak at the annulus could not be higher than the injection pressure, and it was only 80 pounds below it.

Tr. 89. Additionally, Ms. Roberts stressed, "Guidance 35 states that excessive annulus pressure is to be considered at 100 psi or 10 percent of the injection pressure. And at that time of the inspection, the annulus pressure was over 95 percent of the injection pressure." Tr. 90. This is significant for purposes of Part II(B) of the permit.

Respondent's understanding of when a well loses mechanical integrity is similarly mistaken. Whereas Respondent's counsel went to great lengths eliciting testimony from EPA's expert that no remediation of an impacted USDW was ongoing and Respondent's witnesses testified that they never saw any surface indication that the well had failed, this is not how or when a well loses mechanical integrity according to the permit. Tr. 70. As Mr. Wiser testified, the UIC program is a preventative program; if water is gushing from the wellhead or waste fluids are seeping into USDWs, it is too late. Mr. Wiser testified that the UIC program was developed to protect current and potential drinking water aquifers from injection. Tr. 21. The permit, in particular the mechanical integrity requirements, are designed to ensure that waste injection into a disposal well does not harm USDWs. Tr. 24.

The permit at Part II(B) states that pressure on the annulus evidences a loss of mechanical integrity during operation. Tr. 86. Having lost mechanical integrity within the meaning of Part II(B)(4)

of the permit, this is the point where “they’re required to keep the well shut-in until mechanical integrity is restored.” Tr. 86. Furthermore, as Ms. Roberts testified, “According to following this procedure [Guidance 35] and following the permit at Part II(B), if annulus pressure is determined not to be due to thermal fluctuation, then the procedure and permit determines that the annulus pressure is due to loss of mechanical integrity...” Tr. 86. In summary, lost or failed mechanical integrity according to the permit, the singular document controlling the well’s operation, occurs when there is pressure on the annulus not caused by thermal fluctuation indicating that the well’s integrity has been compromised, not after a catastrophic failure occurs.

B. RESPONDENT FAILED TO PROPERLY DEFEND AGAINST THE MECHANICAL INTEGRITY ALLEGATION AND TO ASSERT ANY AFFIRMATIVE DEFENSES

As set forth in 40 C.F.R. § 22.24, Respondent has the dual burdens of presentation and persuasion for any affirmative defenses. Following Complainant’s establishment of its prima facie case, Respondent also has the burden of presenting any adequate and relevant defense to the allegations and responding to the relief requested. Respondent fell short of meeting its burden in this case. Moreover, Respondent failed to allege any affirmative defenses. After stipulating to the two additional violations alleged, Respondent conceded more than contested the facts constituting the alleged loss of mechanical integrity violation.

Respondent introduced into the record testimony that was largely irrelevant. Despite speculating about a prior EPA inspection outside the scope of the proceeding, discussing the well’s construction, disparaging a former employee and alluding to some nonexistent responsibility for EPA to monitor the well’s compliance or approve in advance the repair work done, Respondent did not present an adequate or relevant defense to the mechanical integrity violation alleged in the Complaint. Tr. 54, 144, 166.

Respondent’s testimony is a red herring, intended to direct the Presiding Officer’s attention away from the facts and circumstances that give rise to Respondent’s liability. Respondent argued and took

considerable time and effort to establish that its inaction was somehow the fault of EPA. After spending a great deal of time discussing the standard protocol Maralex expected from its dealings with other regulatory agencies with regard to proposing testing procedures and obtaining concurrence, Mr. Reimers acknowledged that EPA gave a courtesy verbal response at Maralex's request to proceed with Maralex's proposal. Tr. 154-155. Ms. Reid later testified that this was not deemed sufficient by her supervisor, and that even after Mr. Reimers told her that Mr. Wisner had given him the okay to proceed on the testing procedure, "I went to my supervisor, Mickey O'Hare. I talked to him about it, and he said that we still wanted a written response from the EPA before we proceeded with anything." Tr. 170. Ms. Reid never followed up with EPA and asked for a written request. Nor did Ms. Reid, or Mr. Reimers for that matter, check the permit to see if it required EPA approval for testing. Ms. Reid, upon being asked whether she was familiar with what, if any requirements in the permit actually require EPA-approved testing before it is conducted, admitted, "I'm not familiar." Tr. 175. As a matter of fact, no such requirement exists. Stip. Ex. 2

If anything, the record introduced by Respondent provides additional facts in support of the mechanical integrity violation. Respondent agreed that the well was operating during the alleged violation period. Respondent conceded that it is subject to the UIC program and the permit, and that both authorities require that mechanical integrity be established and maintained. Further, Respondent does not dispute that EPA observed annulus pressure during an inspection on May 5, 2010, and again on May 26, 2010. Ms. Roberts testified that accompanied by Respondent's representatives she observed annulus pressure on the well approximately one year later in April 2011. Respondent's witnesses confirmed that the annulus pressure was caused by leaks and/or loose tubing connections and that fluid may have leaked into the annulus from the tubing. Tr. 172; Stip. Exs. 17, 22-24.

Respondent's Counsel's cross-examination of Complainant's witnesses was a thin attempt to distract the Presiding Officer from Respondent's obligations under the permit. For example, Mr.

Zimsky's efforts to establish that the EPA, specifically Mr. Wiser as the inspector, had a duty to have with him during his inspection Guidance 35 misses the point that while the document initially was intended for EPA field staff use upon issuance, it now regularly serves as a resource guide for the regulated community and, in fact, is included and incorporated by reference in the permit for Respondent to follow. Tr. 60.

Respondent's argument that the well never failed a mechanical integrity test is specious, given that they never tested the well for mechanical integrity until it finally was brought off line and repaired in May 2011. Ans. ¶ 20. Respondent was directly on notice as of EPA's May 5, 2010 inspection, if not before, that the annulus had significant pressure. Its own permit provides the steps and procedures to follow to determine whether there is a loss of mechanical integrity if the annulus pressure cannot be maintained at "0" and what to do once this determination is made. Respondent itself initially learned that the tubing had a leak, and found later that they had been leaking through loose connections. Tr. 172; Stip. Ex. 17, 22-24. These undisputed facts viewed in relation to the permit clearly evidence that the well lost mechanical integrity.

C. EPA PROVED BY A PREPONDERANCE OF EVIDENCE THE OVERALL APPROPRIATENESS OF THE PENALTY

The purpose of penalizing violators is three-fold. Penalties seek to deter future violations, maintain a fair and equitable treatment of the regulated community, and provide incentive for expeditiously returning to compliance. Tr. 97; Stip. Ex. 1. Penalty actions also ensure that a violator does not benefit economically by not complying with the environmental regulations. Tr. 97.

The Complaint proposed a penalty of \$111,650 for violations of the UIC permit, UIC program and the SDWA in accordance with the statutory penalty factors and based on Agency penalty guidance. Tr. 99. Specifically, Respondent was assessed a penalty of \$99,700 for the loss of mechanical integrity violation; \$8,050 for the failure to take (or observe) weekly annulus pressure violation; and \$3,900 for

the inaccurate reporting violation. Comp. ¶ 23; Stip. Ex. 1. The SDWA, 42 U.S.C. § 300h-2(c)(1), authorizes a maximum penalty of \$7,500 per violation per day up to a maximum administrative penalty of \$177,500, adjusted per the Inflationary Adjustment Act.² Tr. 97.

Section 1423(c)(4)(B) of the SDWA, 42 U.S.C. § 300h-(c)(4)(B), enumerates the factors the must be considered in assessing a civil penalty, namely: the seriousness of the violation; economic benefit (if any) resulting from the violations; history of violations; economic impact on the violator; good faith efforts to comply; and such other matters as justice may require. Tr. 97, Stip. Ex. 1; Comp.

The EPA uses the UIC Program's Judicial and Administrative Orders Settlement Policy (UIC Penalty Policy) for considering the statutory factors set forth in SDWA § 1423(c)(4)(B), 42 U.S.C. § 300h-(c)(4)(B), to ensure a fair, appropriate and consistent penalty. Tr. 98-99; Stip. Exs. 1, 3. The UIC Penalty Policy assists in applying the statutory factors by providing specific metrics and formulas for determining the appropriate numerical value to assign to each factor. The UIC Penalty Policy has three principal components: gravity, economic benefit and adjustment factors. In addition to providing step-by-step guidance for calculating settlement amounts, the UIC Penalty Policy includes a worksheet for calculating penalty amounts and a list of common UIC program violations by level of seriousness. Stip. Ex. 3. These tools and/or parameters set forth in the UIC Penalty Policy ensure that the statutory factors are considered in an appropriate, non-arbitrary manner.

Although the UIC Penalty Policy is intended as a settlement policy, it provides a critical role in calculating the proposed penalty amount absent a separate pleading policy. Stip. Ex. 3. For the same reasons that the UIC Penalty Policy assists in calculating a settlement amount, namely that its

² The Federal Civil Penalties Inflation Adjustment Act of 1990, as amended by the Debt Collection Improvement Act of 1996, requires EPA to adjust penalties to account for inflation. EPA's Civil Monetary Penalty Inflation Adjustment Rule raised the maximum civil penalty that may be assessed under SDWA 1423(c)(2) to \$7,500 per day, per violation for violations occurring after January 12, 2009, up to a maximum administrative penalty of \$177,500. 40 C.F.R. part 19.

parameters and formulas ensure reasonable and consistent consideration of the statutory penalty factors, it is regularly used by the UIC program as a conservative approach to penalty assessment. Further, because the UIC Penalty Policy incorporates each of the statutory factors the EPA must take into account when determining a civil penalty, its use in this matter was in addition to and not in lieu of consideration of the statutory factors. Tr. 24.

This tribunal previously has addressed the value EPA settlement policies. The Presiding Officer *In the Matter of J. Magness Inc.*, stated, “Although the Agency’s penalty policy for settlement purposes is not binding on the Presiding Officer, it can be helpful in assessing administrative penalties.” Docket No. UIC-VIII-94-03, 1996 EPA RJO LEXIS 9, October 29, 1996. Ms. Roberts testified at hearing the UIC Penalty Policy “is a penalty assessment policy that provides a framework for relating the statutory factors . . . to the facts of a case. And it incorporates them in a way that the EPA can come up –can assess and propose penalties in consistent ways among the regulated community.” Tr. 24.

To further assist in calculating the proposed penalty, the EPA used General Enforcement Policies GM-21 and GM-22. Tr. 98; Stip. Ex. 4, 5. GM-21 describes the goals of assessing a penalty and outlines a penalty assessment approach. Tr. 98; Stip. Ex. 4. GM-22 provides guidance on media specific penalty assessments. Tr. 98.; Stip. Ex. 5. Together, these guidance documents and the regulation-specific UIC Penalty Policy helped the EPA to prepare an overall fair and appropriate penalty in the amount of \$111,650 based on the statutory penalty factors set forth at SDWA § 1423(c)(4)(B), 42 U.S.C. § 300h-(c)(4)(B). Tr. 99; Stip. Exs. 1, 3, 4, 5.

- 1. The Proposed Penalty of \$111,650 was Calculated in Accordance with the Statutory Penalty Criteria Set Forth in SDWA § 1423(c)(4)(B) and EPA Penalty Policies**
 - a. Penalty Calculation for Loss of Mechanical Integrity**
 - i. Gravity Component*

Within the gravity component, the UIC Penalty Policy assesses the statutory factors of seriousness of the violation, economic impact on the violator, duration of the violation and number of wells in violation to calculate the unadjusted gravity. Stip. Ex. 3. The seriousness of the violation is the basic factor from which the gravity component is calculated. Stip. Ex. 3. The UIC Penalty Policy determines the seriousness of a violation based on both potential and actual harm resulting from the violation. Violations are placed in one of three levels, with Level III being the least serious, such as nonthreatening reporting violations, to Level I being the most serious. Tr. 100. Level I violations are those that threaten human health or the environment and/or that violate crucial provisions of the UIC program. Level II violations, being somewhere between Level I and III in terms of seriousness, may be reporting or other types of infractions. Stip. Exs.1, 3.

The EPA initially calculated \$99,700 for the gravity component of the mechanical integrity violation penalty. Stip. Ex. 1. The EPA considers a loss of mechanical integrity as a “most serious” violation and therefore a Level I violation because ensuring that the mechanical integrity of a deep injection well is maintained is a critical component of the UIC program. Tr. 104. Stip. Ex. 1. Within the Level I penalty range, the EPA assigned a numerical or monetary value in the lower 25 percent range because mechanical integrity had been restored at the time of the penalty assessment. Tr. 104. The EPA’s initial seriousness of the violation calculation, serving as the baseline for the overall gravity component, is low but appropriate in light of the circumstances.

As the record reflects, Respondent’s well passes through not one but multiple USDWs, currently being used by seven public water systems and untold numbers of private wells to provide drinking water for human consumption. Stip. Ex. 33; Tr. 30; Stip. Exs. 32, 33. Ms. Victoria Lynn Schmitt, civil engineer for the La Plata Planning Department, testified that she contacted the EPA in the spring of 2011 to follow up on a concern and possible violation in 2010 associated with the well. Tr. 124. When asked specifically what the concern was that alerted the County, Ms. Schmitt responded, “Well, there was a

mechanical integrity test, possible failure of that, which we understand to mean that that could indicate of lead to groundwater contamination.” Tr. 125. When asked whether a loss or failure of mechanical integrity would pose a significant impact to the County, Ms. Schmitt explained, “[w]ell, residents frequently with oil and gas permits express concerns about their groundwater quality. And so in that sense, failure of an injection well could impact them . . .” Tr. 125.

In this case, the seriousness of and potential harm posed by the violation was heightened because Respondent knowingly injected millions of gallons of waste fluid each month into a well with impaired integrity. Respondent operated the well for almost one year despite knowing that the annulus was showing recurring pressure at levels close to the maximum allowable injection pressure and that the well likely had a leak. Following EPA’s inspection on May 5, 2010, wherein EPA observed and Respondent confirmed the annulus pressure, Respondent self-reported a tubing leak in July 2010, and proposed a plan to shut-in and repair the well in August. Respondent did neither, and continued to operate the well. Only after EPA re-inspected the well in April 2011, and ordered Respondent to cease injecting, did Respondent discontinue operations.

In implementing the repair plan from the prior year, Respondent not only confirmed the tubing leak but also identified loose tubing connections through which fluid passed. At no time prior to the repairs in May 2011, did Respondent perform and/or provide the EPA with results from a mechanical integrity test or take any other steps to restore the well’s integrity despite knowing it was compromised. In addition, Respondent did not follow the permit or the procedures set forth therein, including the protocol for determining the source of annulus pressure and what to do if pressure is not thermal induced; for notifying the EPA; for shutting in the well; and for restoring the well’s mechanical integrity.

The Respondent's witness Mr. Reimers acknowledged his concern over the well's operating condition in November 2011. He testified, "we observed then that we were seeing some effects on that annulus that scared us..." Tr. 156. Mr. Wisner on behalf of the Complainant shared Mr. Reimers' concern. In rendering his expert opinion on whether or not the well failed to maintain mechanical integrity in accordance with the permit, Mr. Wisner opined, "my opinion about the well is that this annulus had a leak in it somewhere. It was being operated in this condition where this fail-safe system in the annulus was compromised because of the persistent pressure that kept coming into the annulus, and that that is an unsafe injection practice in light of the fact that there are underground sources of drinking water through with the well passes through the vicinity." Tr. 47.

The Duration of Violation (Duration) factor accounts for ongoing violations by escalating the calculated penalty as the length of violation increased. This factor is defined as the time from the first day of noncompliance until the violator returns the well to compliance. Stip. Ex. 3. The Duration component considered by the EPA in this matter was 12 months beginning July 6, 2010, the date of Respondent's letter wherein Respondent stated they believed the well to have a leak. Stip. Ex. 1. Although the well likely was without mechanical integrity on or before May 5, 2010, the date of the EPA's initial inspection, Ms. Roberts testified that, "the duration considers the date that Maralex sent the letter [July 6, 2010] where they stated that they believed the annulus pressure was caused by a leak, to the date that they repaired the well and showed it to have had mechanical integrity restored, which is May 24, 2011." Tr. 105; Stip. Ex. 1.

Ms. Roberts explained, "[a]dditionally, EPA forgave three months of the violation as conceptually an amount of time in which the operator could reasonably have restored mechanical integrity in their well. This was conservative considering the operator had stated that they believed they would be able to make repairs in August of 2010, which was one month." Tr. 105; Stips. Ex. 1, 11. The assessment of the duration of violation erroneously considered June 7, 2010 as the date Respondent sent

the letter to EPA, rather than July 6, 210. Rather than considering 12 months of violation with 3 months forgiven, using the actual date of the letter, the duration should consider 11 months of violation with 3 months forgiven. The adjustment would result in a decrease of \$9,050, or an overall penalty total of \$101,700. Tr. 106-107.

Economic impact on the violator takes into consideration the violator's business size. Based on available information and conservative estimates, EPA distinguishes between different sized businesses and municipalities to account for varying degrees of impact on violators depending on their financial condition. Stip. Ex. 3. EPA has the discretion to discount this provision/factor where small firms are very profitable and the proposed penalty (without the Economic Impact on the Violator adjustment) will not adversely affect the violator. Stip. Ex. 3. This factor relegates consideration of ability to pay to a secondary consideration that is invoked only when a violator conclusively proves that they are unable to pay the calculated penalty. Stip. Ex. 3. In the instant case, Respondent did not assert an ability to pay claim nor provide relevant financial information warranting a downward adjustment to the gravity portion of the penalty calculation. Stip. Ex. 1.

The Number of Wells in Violation factor takes into consideration the number of wells owned by a single well operator alleged to be in violation of the same UIC requirement. Stip. Ex. 3. One well was in violation.

ii. Economic Benefit Component

"Economic benefit is the benefit that the violator derived by not complying with the regulation, in not spending the money to comply and remain in compliance with the regulations." Tr. 561. The EPA uses the computer model "BEN" to calculate the economic benefit a violator derives from delaying or avoiding compliance with environmental statutes. The EPA used the BEN computer model in this case to assist with applying the economic benefit statutory factor. Stip. Ex. 1.

In this case, economic benefit was considered by the EPA as a delayed cost. Ms. Roberts testified that as a conservative estimate, she used \$13,000 as the cost of the workover Respondent should initially have performed based on Respondent's July 6, 2010 letter, but instead delayed doing until issued the second NOV by the EPA in May 2011. Tr. 106. Using the BEN model, the delayed economic benefit cost totalled \$537. Tr. 106; Stip. Ex. 1

iii. Adjustment Component

The gravity component adjustment factor of the UIC Penalty Policy permits increases and decreases in the gravity component to account for a violator's compliance history; level of cooperation/noncooperation, and the willfulness or negligence associated with the violation. Stip. Exs. 1, 3. Ms. Roberts testified that no adjustment for good faith or past compliance was made to the gravity calculation. Tr. 103.

The final element, other factors as justice may require, "vests the Agency with broad discretion to reduce the penalty *when other adjustment factors prove insufficient or inappropriate to achieve justice.*" *Catalina Yachts, Inc.*, 8 E.A.D. at __, EPCRA Appeal Nos. 98-2 & 98-5, slip. Op. at 22 (March 24, 1999) (emphasis in original). The Environmental Appeals Board has held:

Use of the justice factor should be far from routine, since application of the adjustment factors normally produces a penalty that is fair and just. (citation omitted.) Thus, it is clear that the justice factor comes into play only where application of the other adjustment factors has not resulted in a "fair and just" penalty.

Circumstances in this matter did not warrant use of the "other matters as justice may require" factor. Stip. Ex. 1.

b. Penalty Calculation for Failure to Observe Weekly Annulus Pressure

i. Gravity component

The EPA calculated \$7,928 for the gravity component of the failure to observe weekly annulus pressure violation. Stip. Ex. 1. Ms. Roberts testified:

As far as the seriousness of violation goes, the Agency considers this either a serious violation or a most serious violation. Routine monitoring of the annulus specifically allows the operator to identify issues that may occur within their well as they arise. And so it's a critical requirement for protecting underground sources of drinking water to be able to detect issues that may arise quickly.

Tr. 38, 102-103; Stip. Ex. 1. Because Respondent already believed they had a leak and knew that their annulus had pressure on it, the EPA in this case assigned the violation as a Level II. Tr. 103. With regard to Duration, Ms. Roberts stated that "although we have indication that the routine monitoring required by the permit was not being conducted for longer than this, for the duration assessment, I considered the pumper's statement that the pumper and Ms. Reid confirmed a time period of six to eight months, and I used seven months as the duration considered in the assessment. One well was considered." Tr. 103.

ii. Economic Benefit Component

The EPA calculated an economic benefit penalty of \$141. This figure reflects the benefit to Respondent for not paying the employee time associated with monitoring weekly. Tr. 104; Stip. Ex. 1.

iii. Adjustment Component

No upward or downward adjustments to the gravity component were made based on good faith effort to comply, history of violation, or other matters as justice may require. Tr. 103; Stip. Ex. 1.

c. Penalty Calculation for Inaccurate Reporting

i. Gravity Component

The EPA calculated \$3,883 for the gravity component of the inaccurate reporting violation. This figure was rounded to \$3,900. Ms. Roberts testified that inaccurate reporting is considered the least

serious or Level III –type violation with a starting point of 50 percent. Tr. 101. Ms. Roberts stated, “As far as seriousness of violation goes, accurate information reported to EPA is what the Agency relies on, partially to determine compliance with the permit and having knowledge of the conditions the well is operating in.” Tr. 101; Stip. Ex. 1. A Duration of 12 months was used in calculating the penalty based on the number of months falsely reported in the 2010 annual monitoring report. Tr. 101.

ii. Economic Benefit Component

No economic benefit component existed for this violation. Tr. 101-102.

iii. Adjustment Component

No upward or downward adjustments to the gravity component were made based on good faith effort to comply, history of violation, or other matters as justice may require. Tr. 102; Stip. Ex. 1.

2. Respondent Failed to Adequately Respond to the Relief Requested

Respondent bears the burden pursuant to 40 C.F.R. § 22.24 of presenting any response or evidence with respect to the appropriate relief. Similar to Complainant, Respondent is subject to a preponderance of the evidence standard in carrying its burden of proof. *In the Matter of Aguakem Caribe, Inc.*, Docket No. RCRA-02-2009-7110, 2011 EPA ALJ LEXIS 24 (December 22, 2011). The sparse testimony and exhibits relating to Respondent’s financial health put forth by Respondent fail to show that the overall relief proposed is anything other than appropriate.

In its Answer, Respondent claims that the proposed civil penalties are disproportional to any violations that may have occurred. In support of its contention, Respondent claims that even if it did not observe annulus pressure on a consistent weekly basis, they checked the pressure frequently. Ans. ¶23. In further support of its contention that the penalty is disproportionate to the violations, Respondent says that EPA already was aware of the annulus pressure and did not require Maralex to shut-in the well until

April 19, 2011, at which time EPA for the first time requested that Maralex conduct a mechanical integrity test of the well. Ans. ¶23. Lastly, Respondent addresses the proposed penalty by claiming that the annual reporting requirement was optional, and furthermore that the EPA already was aware of the correct annulus pressure measurements despite Respondent having inaccurately reported both the maximum and averaged pressures for 12 continuous months. Ans. ¶23.

Whereas the responses proffered by Respondent evidence a lack of familiarity with and understanding of its permit, these statements do not adequately respond to the appropriateness of the penalty proposed by Complainant. The only other information provided by Respondent indirectly relating to the penalty is limited financial information in the form of the testimony of Maralex Disposal owner and operator Alexis Michael O'Hare and Stipulated Exhibit 26, Maralex's Income Statements and Balance Sheets for December 31, 2008; December 31, 2009; and December 31, 2010. Stip. Ex. 26. Lastly, Respondent introduced for the first time at hearing two additional financial documents: Maralex's Income Statement and Balance Sheet (Assets and Liabilities and Equities) for December 31, 2011. Stip. Ex. 38.

Ms. Roberts testified that Respondent did not assert any ability to pay claim or provide relevant financial information warranting a downward adjustment to the gravity portion of the penalty calculation. Stip. Ex. 1. Maralex's Income Statements and Balance Sheets for December 31, 2008; December 31, 2009; and December 31, 2010, do not provide comprehensive financial information for Maralex Disposal because they include only Maralex Disposal's and the well's income and expenses and do not reflect the assets and expenses covered by Maralex Resources, Inc. Tr. 197. Neither the documents themselves nor pertinent testimony adequately demonstrate if, much less why, the penalty proposed is not appropriate.

If anything, the record with regard to the relationship between co-owned and operated Maralex Maralex Disposal LLC and Resources, Inc., suggests that Maralex Disposal LLC is larger and with greater assets than it represents on its own. On Direct Examination, Mr. O'Hare testified that he is sole owner of Maralex Disposal and also runs "about a dozen" other companies, including Maralex Resources. Tr. 177. After forming Maralex Resources, Inc., in 1989, Mr. O'Hare created Maralex Disposal in 1995. Tr. 177; Stip. Ex. 19-21. Although stating that Maralex Disposal LLC and Maralex Resources, Inc., have different ownership structure, Mr. O'Hare described the companies as indirectly sharing assets. Tr. 195. Mr. O'Hare testified that "Maralex Resources is an investor in both Ferguson and the Center Point facilities." Tr. 195. According to Mr. O'Hare, Maralex Disposal has no employees and bills Maralex Resources for the use of its engineers and field people. Tr. 196. The two companies share the same officers, mailing address, engineers and field staff.

The hypothetical penalty scenarios Mr. Zimsky asked Ms. Roberts to comment on during cross-examination are inappropriate for responding to the appropriateness of the overall penalty. Tr. 114-118. As Ms. Roberts responded, calculating penalties is case and/or fact specific. Tr. 114. Mr. Zimsky's cross-examination of the Duration component of Ms. Roberts' penalty testimony fails to adequately demonstrate that Duration for the mechanical integrity violation should have been less. Tr. 110. The record shows that Duration for the mechanical integrity violation was appropriately calculated up to the date that mechanical integrity was restored after the rework and mechanical integrity test results were shown as passing. Tr. 121. Mr. Zimsky's cross-examination of Ms. Roberts also fails to adequately demonstrate that Duration for the failure to monitor violation should have been less. While Respondent testified to checking the annulus pressure irregularly but frequently, Respondent to date has failed to submit any monitoring records. Instead, Respondent admitted to failing to monitor according to the conditions of the permit for at least the 7 month duration considered in the penalty assessment.

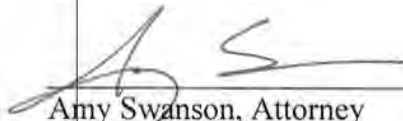
VI. CONCLUSION

For the foregoing reasons, Complainant respectfully requests that an order be entered in Complainant's favor finding Respondent liable as a matter of law for its violations of the UIC permit, UIC program and SDWA section 1423 alleged in the Complaint, and imposing a civil penalty in the amount of \$101,700.

Respectfully submitted,

12.14.2012

Date



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Counsel for Complainant

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on December 14, 2012, the original and one true copy of the COMPLAINANT'S INITIAL POST-HEARING BRIEF were hand-carried to the Regional Hearing Clerk, EPA Region 8, 1595 Wynkoop Street, Denver, Colorado, and that a true copy of the same was sent as follows:

Via hand-delivery to:

The Honorable Elyana R. Sutin
Regional Judicial Officer
U.S. EPA Region 8 (8RC)
1595 Wynkoop Street
Denver, CO 80202-1129

Via electronic and regular mail to:

Mr. William E. Zimsky, Esq.
Abadie Schill
1099 Main Street, Suite 315
Durango, CO 81301
wez@oilgaslaw.net

(on 12/18/2012 due to Respondent's request on 12/17/2012 for an extension and pending decision by Presiding Officer not until 12/17/2012)

Date: 12/18/2012

By: 