

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF:

JKLM Energy, LLC	:	Violations of the 2012 Oil and Gas
Reese Hollow 118 2HU	:	Act, the Clean Streams Law, and 25
Permit No. 105-21852	:	Pa. Code Chapter 78 (relating to Oil
Sweden Township, Potter County	:	and Gas Wells)

CONSENT ORDER AND AGREEMENT

This Consent Order and Agreement (hereinafter "CO&A") is entered into this 21st day of October, 2016, by and between the Commonwealth of Pennsylvania, Department of Environmental Protection (hereinafter "DEP"), and JKLM Energy, LLC (hereinafter "JKLM").

The DEP has found and determined the following:

A. The DEP is the agency with the duty and authority to administer and enforce the Oil and Gas Act, Act of December 19, 1984, P.L. 1140, as amended, 58 Pa. C.S. §§ 3201-3274 (hereinafter "2012 Oil and Gas Act"); The Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended, 35 P.S. § 691.1 et seq. (hereinafter "Clean Streams Law"); Section 1917-A of the Administrative Code, Act of April 9, 1929, P.L. 177, as amended, 71 P.S. § 510-17 (hereinafter "Administrative Code"); and the rules and regulations promulgated thereunder.

B. JKLM is a Delaware Limited Liability Company authorized to do business in Pennsylvania, which maintains a business address of 2200 Georgetowne Drive, Suite 500, Sewickley, Pennsylvania 15143.

C. JKLM is a "person" in accordance with Section 3203 of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3203, and Section 1 of the Clean Streams Law, 35 P.S. § 691.1.

D. JKLM owns and operates the Reese Hollow 118 2HU natural gas well (hereinafter "Gas Well"), authorized by Permit Number 105-21852, located in Sweden Township, Potter County, Pennsylvania. The Reese Hollow Pad 118 well site (hereinafter "Well Site"), owned and operated by JKLM, also contains the Reese Hollow 118 1HU and 3HU natural gas wells, authorized by Permit Numbers 105-21851 and 105-21853 respectively, located in Sweden Township, Potter County, Pennsylvania.

E. On September 14, 2015, JKLM began drilling the Gas Well. During surface hole drilling, the drill bit, which had been lubricated with Rock Drill Oil 150, became lodged downhole at approximately 570 feet below ground surface.

F. Between September 15 and 18, 2015, an estimated 100 gallons of an unapproved drilling surfactant, F-485, were introduced into the surface hole for drill cuttings recovery and as part of the drill bit recovery operations. Subsequently, the surfactant, which had been diluted with fresh water, migrated into groundwater via subsurface fractures.

G. On September 18, 2015, JKLM was contacted by a complainant in Sweden Township, Potter County, Pennsylvania, who reported that there was soap in his water supply. On the same day, the DEP received a complaint from a second complainant in Sweden Township, Potter County, Pennsylvania, who also reported that his water was cloudy and had soap suds in it.

H. In total, the DEP received 17 private water supply complaints in the area and determined that 6 private water supplies, as identified in the list attached hereto and identified as Exhibit A, had been impacted by the drilling activities at the Gas Well.

I. After being notified of the surfactant release, 4 public water supply wells, 2 operated by the Coudersport Borough Water Authority and 2 operated by Charles Cole Memorial Hospital, were sampled and monitored for signs of an impact. All 4 public water supply wells were temporarily shut down out of precaution. To date, none of these public water supplies appears to have been impacted.

J. By October 2, 2015, JKLM provided a temporary alternate water source at five of the six homes impacted by the drilling activities at the Gas Well.

K. On September 24, 2015, the DEP received a complaint that a local pond had turned milky white. Analysis of samples taken from the pond indicated that it had been impacted by the surfactant release. Additionally, analysis of samples taken from a spring located on the Charles Cole Memorial Hospital's property indicated that the spring had also been impacted by the surfactant release. The spring is not a water source for the public water supply serving the hospital.

L. On September 30, 2015, the DEP issued JKLM a Notice of Violation ("NOV") for the following:

- 1) Failure to construct and operate a well in accordance with 25 Pa. Code Chapter 78, in violation of Sections 78.73(a) and (b), 25 Pa. Code §§ 78.73(a) and 78.73(b);
- 2) Unpermitted usage of a drilling additive, in violation of Section 78.83(c), 25 Pa. Code § 78.83(c); and,
- 3) The unpermitted discharge of polluttional substances to waters of the Commonwealth, in violation of Section 401 of the Clean Steams Law, 35 P.S. § 691.401.

M. On October 2, 2015, JKLM submitted to the DEP a Work Plan prepared by its consultant Penn E&R outlining their planned hydrogeologic investigation. On July 21, 2016, JKLM submitted an "Interim Hydrogeologic Report for the Release from the JKLM Reese Hollow Pad 118."

N. Between late October and early November 2015, JKLM installed 4 groundwater monitoring wells on the Well Site.

O. On November 18, 2015, JKLM completed plugging of the Gas Well. The plugging certificate was approved on December 29, 2015.

P. By July 12, 2016, after obtaining DEP approval, JKLM had installed treatment systems on all private water supplies that the DEP had determined to have been impacted. JKLM is continuing to monitor the affected area, including the affected water supplies, monitoring wells and surface water features.

Q. JKLM has voluntarily relinquished all well permits, listed in Paragraph D, above, for the Well Site.

R. JKLM has voluntarily indicated to the DEP that it will not apply for any additional well permits or drill any additional wells on the Well Site.

S. JKLM has voluntarily provided the DEP with a map indicating surface lands around the Well Site that JKLM has agreed not to use for oil and gas drilling activities. That map is attached hereto as Exhibit B.

T. JKLM has submitted Notices of Intent to plug the Reese Hollow 118 IHU and 3HU natural gas wells (conductor only), and the wells have been plugged in accordance with Section 78.91, 25 Pa. Code § 78.91. The plugging certificates were approved on June 23, 2016.

U. JKLM promptly undertook an extensive effort to sample any potentially affected water supplies and consistently shared the results of its sampling program with the DEP. JKLM cooperated with DEP, and has responded in a timely fashion to all of the DEP's directives and requests.

V. Section 78.73(a), 25 Pa. Code § 78.73(a), states that "[t]he operator shall construct and operate the well in accordance with this chapter and ensure that the integrity of the well is maintained and health, safety, environment and property are protected."

W. Section 78.73(b), 25 Pa. Code § 78.73(b), states that "[t]he operator shall prevent gas, oil, brine, completion and servicing fluids, and any other fluids or materials from below the casing seat from entering fresh groundwater, and shall otherwise prevent pollution or diminution of fresh groundwater."

X. The failure to prevent pollution of fresh groundwater during drilling, as described in Paragraphs G., H., and K., above, constitutes violations of Sections 78.73(a) and (b), 25 Pa. Code §§ 78.73(a) and 78.73(b).

Y. Section 78.83(c), 25 Pa. Code § 78.83(c), states in relevant part that "[t]he surface hole shall be drilled using air, freshwater, or freshwater-based drilling fluid."

Z. JKLM's use of an unapproved drilling additive to drill the surface hole, as described in Paragraph F., above, constitutes a violation of Section 78.83(c), 25 Pa. Code § 78.83(c).

AA. Section 401 of the Clean Streams Law, 35 P.S. § 691.401, states that "[i]t shall be unlawful for any person or municipality to put or place into any of the waters of the Commonwealth, or allow or permit to be discharged from property owned or occupied by such person into any waters of the Commonwealth, any substance of any kind or character resulting in pollution as herein defined."

BB. The unpermitted discharges of drilling additives, polluttional substances, into groundwater, a water of the Commonwealth, as described in Paragraphs G., H., and K., above, constitute a violation of Section 401 of the Clean Streams Law, 35 P.S. § 691.401.

CC. The violations described in Paragraphs X., Z., and BB., above, constitute unlawful conduct under Section 3259 of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3259; and Section 611 of the Clean Streams Law, 35 P.S. § 691.611; constitute a public nuisance under Section 3252 of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3252; and Section 401 of the Clean Streams Law, 35 P.S. § 691.401; and subject JKLM to civil penalty liability under Section 3256 of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3256; and Section 605 of the Clean Streams Law, 35 P.S. § 691.605.

DD. Pursuant to the DEP's "Policy for the Acceptance of Community Environmental Projects in Conjunction with Assessment of Civil Penalty," JKLM has submitted a proposal to contribute to a community environmental project. Pursuant to the proposal, JKLM will provide funding to help pay for a Monitoring Equipment Project, which includes the purchase and installation of continuous conductivity monitors for eleven public water supplies, to be conducted by the Triple Divide Watershed Association (the "Project"). A description of the Project is attached hereto as Exhibit C and incorporated herein by reference.

EE. The DEP has determined that the Project will provide a substantial public health and safety and environmental benefit and that contributing to funding the Project is not something that JKLM is otherwise legally required to do. The DEP has agreed that the value of JKLM's contribution to the Project is One Hundred Thousand Dollars (\$100,000.00).

After full and complete negotiation of all matters set forth in this CO&A, and upon mutual exchange of the covenants contained herein, the parties desiring to avoid litigation and intending to be legally bound, it is hereby ORDERED by the DEP and AGREED to by JKLM as follows:

1. **Authority.** This CO&A is an Order of the DEP authorized and issued pursuant to Section 3253 of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3253; Section 5 of the Clean Streams Law, 35 P.S. § 691.5; and Section 1917-A of the Administrative Code, 71 P.S. § 510-17.

2. **Findings.**

- a) JKLM agrees that the findings in Paragraphs A. through W, Y, AA, DD, and EE, above, are true and correct and, in any matter or proceeding involving JKLM and the DEP, JKLM shall not challenge the accuracy or validity of these findings.

- b) The parties do not authorize any other persons to use the findings in this CO&A in any matter or proceeding.

3. Corrective Actions.

Reese Hollow 118 Well Site

- a) JKLM shall not apply for any additional well permits or drill any additional wells on the Well Site.
- b) JKLM shall conduct site remediation activities for the Well Site in accordance with the Land Recycling and Environmental Remediation Standards Act (Act 2), 35 P.S. §§ 6026.101-6026.909.
- c) Within 60 days of receipt of Act 2 Relief of Liability, JKLM shall restore the Well Site in accordance with Section 3216 of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3216, and Section 78.65, 25 Pa. Code § 78.65.

Water Supply Restoration/Replacement

- d) JKLM shall sample the raw/untreated water at each restored/replaced water supply for at least 4 quarters following installation of the water treatment systems. JKLM may only cease or modify the quarterly sampling with the DEP's written approval or upon receipt of Act 2 Relief of Liability.
- e) Within 60 days of execution of this CO&A, JKLM shall submit a final report detailing its water supply restoration/replacement activities. The report shall contain, for each restored/replaced water supply:
 - o Sample results verifying that the restored/replaced water supply meets Safe Drinking Water Act standards;
 - o Specific information on the installed treatment system; and,
 - o Specific information addressing responsibilities for long-term operation and maintenance of the treatment system.

4. Civil Penalty Settlement. In settlement of the DEP's claim for civil penalties, which the DEP is authorized to pursue under Section 3256 of the 2012 Oil and Gas Act, 58 Pa. C.S. § 3256, and Section 605 of the Clean Streams Law, 35 P.S. § 691.605; the DEP hereby assesses a civil penalty of Four Hundred Seventy Two Thousand Three Hundred Seventeen Dollars (\$472,317.00) for the violations identified in Paragraphs X., Z., and BB., above. The payment shall be made by corporate check or the like or wire transfer, made payable to the "Commonwealth of Pennsylvania", and forwarded to Eastern District Oil and Gas Operations, Pennsylvania DEP of Environmental Protection, 208 West Third Street, Suite 101, Williamsport, Pennsylvania 17701-6448. Additionally, the payment shall be made in conjunction with the return of this CO&A by JKLM to the DEP as described in Paragraph 12, below.

5. **Community Environmental Project.**

- a) Within 10 days of execution of this CO&A, JKLM shall pay a cashier's check in the amount of One Hundred Thousand Dollars (\$100,000.00) to the account established by the Potter County Commissioners in the County Treasurer's office, for joint administration of the Project by the Potter County Commissioners and the Triple Divide Watershed Coalition, as described in the Project description in Exhibit C and Paragraph DD., above.
- b) Within 1 year of execution of this CO&A, JKLM shall submit to the Department a Final Report ("Final Report") summarizing the Project's results. The Final Report shall also contain an affidavit of the corporate official responsible for overseeing the Project, certifying that the Project is complete and containing a statement setting forth all costs incurred in completing the Project.
- c) JKLM agrees that whenever it publicizes, in any way, the Project, it will state that the Project was undertaken as part of the settlement of an enforcement action with the DEP.

6. **Tax Deductibility.** JKLM shall not deduct any costs incurred in connection with or in any way associated with the Community Environmental Project described in Paragraph 5 for any tax purpose or otherwise obtain favorable tax treatment for those costs. If requested to do so by the DEP, JKLM shall submit an affidavit of the corporate officer responsible for the financial affairs of JKLM certifying that JKLM has not deducted or otherwise obtained favorable tax treatment of any of the costs of the Community Environmental Project.

7. **Stipulated Civil Penalties.**

- a) In the event JKLM fails to comply in a timely manner with any provision of this CO&A, JKLM shall be in violation of this CO&A and, in addition to other applicable remedies, shall pay a stipulated civil penalty in the amount of One Thousand Dollars (\$1,000.00) per day for each day, or any portion thereof, that JKLM fails to meet the deadlines established herein above in Paragraphs 3 and 5.
- b) Stipulated civil penalties shall be due automatically and without notice on or before the fifteenth (15th) day of each month following the month in which the violations occur.
- c) The provisions of Paragraphs 7.a and 7.b, above, shall terminate on the date that the required activities described in Paragraphs 3 and 5, above, are determined by the DEP to have been fully completed.

8. **Additional Remedies.**

- a) In the event JKLM fails to comply with any provision of this CO&A, the DEP may, in addition to the remedies prescribed herein, pursue any remedy

available for a violation of an order of the DEP, including an action to enforce this CO&A.

- b) The remedies provided by this Paragraph and Paragraph 7 (Stipulated Civil Penalties) are cumulative and the exercise of one does not preclude the exercise of any other. The failure of the DEP to pursue any remedy shall not be deemed to be a waiver of that remedy. The payment of a stipulated civil penalty, however, shall preclude any further assessment of civil penalties for the violation for which the stipulated civil penalty is paid.

9. **Reservation of Rights.** The DEP reserves the right to require additional measures to achieve compliance with applicable law. JKLM reserves the right to challenge any action which the DEP may take to require those measures.

10. **Liability of Operator.** JKLM shall be liable for any violations of the CO&A, including those caused by, contributed to, or allowed by its officers, agents, employees, or contractors. Except as provided in Paragraph 11.c., JKLM also shall be liable for any violation of this CO&A caused by, contributed to, or allowed by its successors and assigns.

11. **Transfer of Site.**

- a) The duties and obligations under this CO&A shall not be modified, diminished, terminated or otherwise altered by the transfer of any legal or equitable interest in the Well Site which is affected by this CO&A, or any part thereof.
- b) If JKLM intends to transfer any legal or equitable interest in the Well Site which is affected by this CO&A, JKLM shall serve a copy of this CO&A upon the prospective transferee of the legal and equitable interest at least thirty (30) days prior to the contemplated transfer and shall simultaneously inform the Eastern Oil and Gas District of the DEP of such intent.
- c) The DEP in its sole discretion may agree to modify or terminate JKLM's duties and obligations under this CO&A upon transfer of the Well Site, or any part thereof. JKLM waives any right that it may have to challenge the DEP's decision in this regard.

12. **Correspondence with DEP.** All correspondence with the DEP concerning this CO&A shall be addressed to:

Jennifer W. Means
Environmental Program Manager
Eastern District Oil and Gas Operations
Department of Environmental Protection
208 West Third Street, Suite 101
Williamsport, PA 17701-6448
Phone: (570) 321-6557
e-Mail: jenmeans@pa.gov

13. **Correspondence with JKLM.** All correspondence with JKLM concerning this CO&A shall be addressed to:

Scott Blauvelt
Regulatory Manager
JKLM Energy, LLC
2200 Georgetowne Drive, Suite 500
Sewickley, PA 15143
Phone: (412) 337-0775
e-Mail: sblauvelt@emslp.com

JKLM shall notify the DEP whenever there is a change in the contact person's name, title, or address. Service of any notice or any legal process for any purpose under this CO&A, including its enforcement, may be made by mailing a copy by first class mail to the above address.

14. **Severability.** The paragraphs of this CO&A shall be severable and should any part hereof be declared invalid or unenforceable, the remainder shall continue in full force and effect between the parties.

15. **Entire Agreement.** This CO&A shall constitute the entire integrated agreement of the parties. No prior or contemporaneous communications or prior drafts shall be relevant or admissible for purposes of determining the meaning or intent of any provisions herein in any litigation or any other proceeding.

16. **Attorney's Fees.** The parties shall bear their respective attorney fees, expenses and other costs in the prosecution or defense of this matter or any related matters, arising prior to execution of this CO&A.

17. **Modifications.** No changes, additions, modifications, or amendments of this CO&A shall be effective unless they are in writing and signed by the parties hereto.

18. **Titles.** A title used at the beginning of any paragraph of this CO&A may be used to aid in the construction of that paragraph, but shall not be treated as controlling.

19. **Decisions under Consent Order.** Any decision which the DEP makes under the provisions of this CO&A, including a notice that stipulated civil penalties are due or that a document submitted to the DEP by JKLM is disapproved or requires modification, is intended to be neither a final action under 25 Pa. Code § 1021.2, nor an adjudication under 2 Pa. C.S. § 101. Any objection which JKLM may have to the decision will be preserved until the DEP enforces this CO&A.

20. **Termination.** The obligations of Paragraph 3 shall terminate when the DEP determines that JKLM has complied with the requirements of Paragraph 3.

21. **Execution of Agreement.** This CO&A may be signed in counterparts, each of which shall be deemed to be an original and all of which together shall constitute one and the same instrument. Facsimile signatures shall be valid and effective.

IN WITNESS WHEREOF, the parties have caused this CO&A to be executed by their duly authorized representatives. The undersigned representatives of JKLM certify under penalty of law, as provided by 18 Pa. C.S. § 4904, that they are authorized to execute this CO&A on behalf of JKLM; that JKLM consents to the entry of this CO&A as a final Order of the DEP; and that JKLM hereby knowingly waives its rights to a hearing under the statutes referenced in this CO&A; and that JKLM knowingly waives its right to appeal this CO&A, which rights may be available under Section 4 of the Environmental Hearing Board Act, the Act of July 13, 1988, P.L. 530, No. 1988-94, 35 P.S. § 7514; the Administrative Agency Law, 2 Pa. C.S. § 103(a) and Chapters 5A and 7A; or any other provision of law. Signature by JKLM's attorney certifies only that the agreement has been signed after consulting with counsel.

FOR JKLM ENERGY, LLC.:

FOR THE COMMONWEALTH OF PENNSYLVANIA, DEP OF ENVIRONMENTAL PROTECTION:

Scott C. Brevett
Signature (Date)

Jennifer W. Means 10/21/16
Jennifer W. Means (Date)
Environmental Program Manager
East Region Oil and Gas Management

Scott C. Brevett
Name (Typed or Printed)

Director of E&S
Title for JKLM Energy, LLC

John P. Sieminski
Signature (Date)

Geoffrey J. Ayers 10/21/2016
Geoffrey J. Ayers (Date)
Regional Counsel
Northcentral Region

John P. Sieminski
Name (Typed or Printed)

Secretary
Title for JKLM Energy, LLC

Signature (Date)

Kevin J. Garber
Kevin J. Garber: Attorney for JKLM Energy, LLC

EXHIBIT A

CONTAINS CONFIDENTIAL COMPLAINANT INFORMATION

List of Impacted Water Supplies

1.

2.

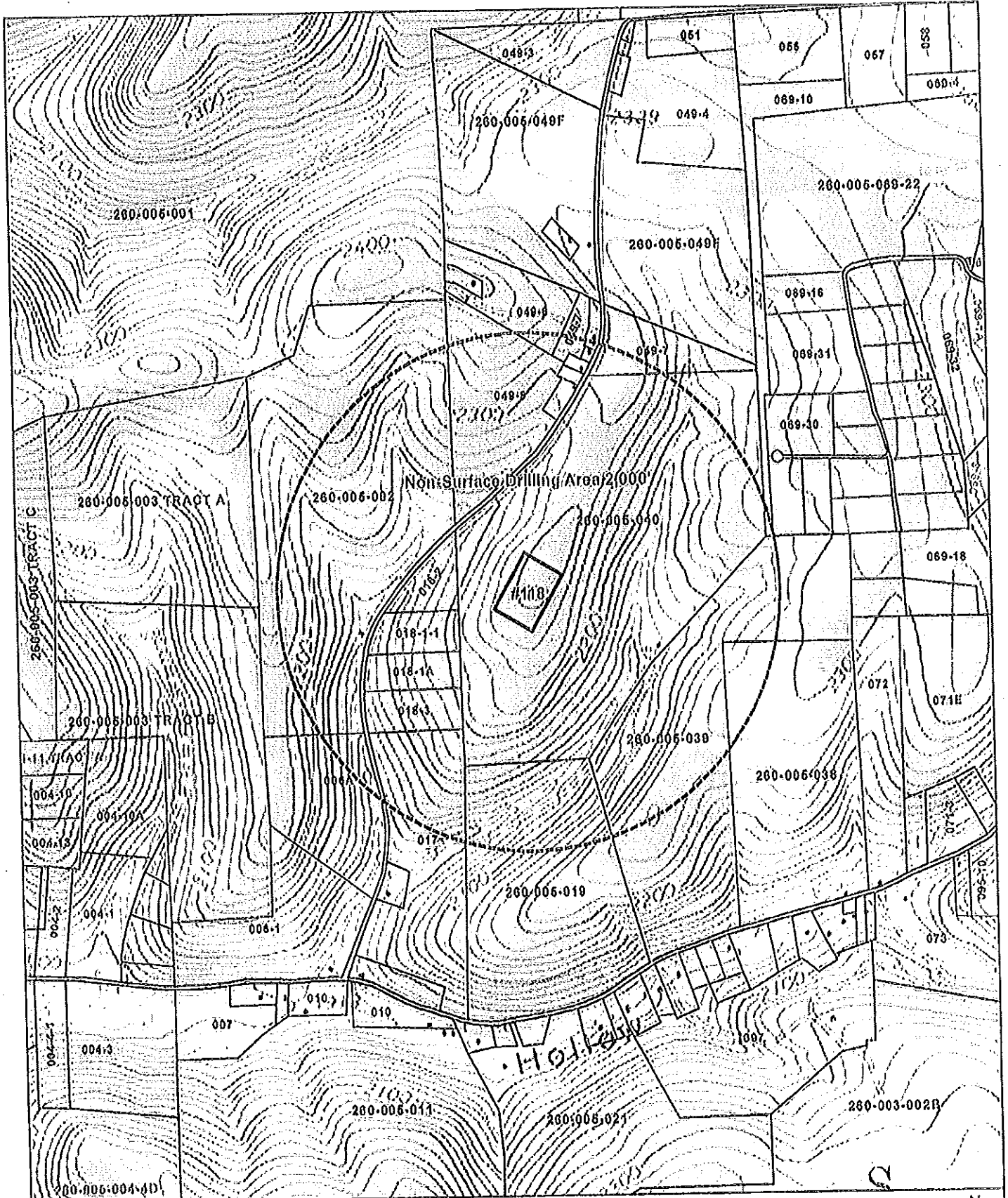
3.

4.

5.

6.

EXHIBIT B



REESE HOLLOW #118: NON SURFACE DRILLING

SWEDEN TOWNSHIP

POTTER COUNTY, PA

DATE: 08/07/2016



Non-Surface Drilling Area



Reese Hollow #118 Wellpad

JCLM ENERGY

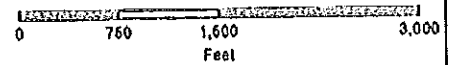


EXHIBIT C

JKLM CEP Proposal

1. Identification of person or regulated entity subject to enforcement action (including contact information)

JKLM Energy, LLC
2200 Georgetown Drive, Suite 500
Sewickley, PA 15143
P: (724) 935-8943
E: jps@emslp.com

2. Project background

JKLM Energy, LLC proposes to supply funding to the Triple Divide Watershed Coalition to contribute to the Coalition's efforts to have all of the community water supplies in Potter County actively involved with enhancing the existing protection drinking water sources through the installation of continuous conductivity monitoring equipment. The Triple Divide Watershed Coalition consists of representatives from each of the nine community water suppliers, County government, DEP, the Penn State Extension and the Potter County Conservation District. The stated mission of the Coalition is to jointly pursue common sourcewater protection and educational goals, to seek means of improving emergency responsiveness in the water recharge areas and to lobby DEP to include recharge areas in future permit review processes. The Coalition seeks to preserve the County's principle drinking water sources from reductions in both quality and quantity by seeking to reduce the potential risks within the delineated recharge areas. Since the beginning of shale drilling, four of the nine Community water suppliers have been directly or indirectly impacted from these operations due in large part to drillers not being aware of the proximity of the delineated recharge areas. In response, the Triple Divide Watershed Coalition agreed to a two pronged strategy: 1.) Increased efforts to have the recharge areas included as a part of DEP's permit review procedures; and 2.) Seeking funding to install continuous conductivity monitoring equipment in all of the water treatment plants.

3. Overall project proposal

The Potter County Commissioners have agreed to establish a special account within the County Treasurer's office to administer the financing of the project on behalf of the Triple Divide Watershed Coalition. The project will be jointly supervised by the Triple Divide Watershed Coalition and the Potter County Planning Commission.

The Triple Divide Watershed Coalition is currently exploring multiple options for recording, transmission and storage of the monitoring data. The current level of funding is sufficient to insure that continuous conductivity monitoring equipment can be installed at each water treatment plant at no cost to the suppliers; however each system will assume responsibility for all future maintenance of the equipment. Although the specific monitoring equipment may vary from plant to plant, each system will be capable of automatic operator notification in the event a pre-set trigger level conductivity is exceeded. In addition, each monitoring device will be capable of

transmitting data to a common off-site location for permanent storage. Following the installation of the monitoring equipment, each of the current DEP approved sourcewater protection plans will be updated to include the installation of these devices. There likely will be some costs involved with transmission and maintenance of the off-site storage unit. Therefore a portion of the funds will be set aside to cover these, if necessary. The Triple Divide considers it prudent to set aside funds for the purchase of an additional monitoring device which could be installed at any system in the event that one of the operational units require repair.

It is understood that, at the conclusion of this project, any unused funds will be returned to the Pennsylvania Department of Environmental Protection.

4. Location (county, municipality, watershed, etc.)

Potter County water supply systems including: Austin Borough, Coudersport Borough Authority, Cole Memorial Hospital, Galeton Borough Authority, Genesee Township Water Authority, Northern Tier Children's Home, Roulette Township, Shinglehouse Borough and Ulysses Borough.

5. Implementation and monitoring plan

Each water supplier will be responsible for installation and all future maintenance of this equipment. DEP staff has determined that installation of this equipment will not require any permits or permit amendments

6. Proposed benefit(s) to public health and safety or the environment

Installation of monitoring equipment will realize the following benefits for each water supplier:

- i. Continuous monitoring of raw water quality entering all Community Public Water systems within the boundaries of Potter County
- ii. Automatic notification of water treatment plant operators if water quality changes beyond pre-determined limits
- iii. Creation of a permanent history of dependability of the sources
- iv. Independent storage and handling of the data
- v. Completion of an updated sourcewater protection plan
- vi. Data availability to other agencies and/or customers via internet
- vii. Possible real-time viewing

7. Partners and outreach activities

This project has been endorsed by the Potter County Commissioners, the Potter County Conservation District, the Potter County Planning Commission and the Triple Divide Watershed Coalition. Other organizations involved with the project are listed in Paragraph 2 above.

