

## CATATAN REVIEWER

Judul:

*Implementation Of Mining Exploration Activities And The Implication On Bioremediation  
Case In Rokan Riau Block In Legal Perspectives*

Oleh :

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#### A. Tanggal Diterbitkan:

*Publication date : INTERNATIONAL JOURNAL OF SCIENTIFIC &  
TECHNOLOGY RESEARCH VOLUME 8, ISSUE 09, SEPTEMBER 2019 ISSN  
2277-8616*

#### B. Dipublikasikan oleh:

*International Journal of Scientific and Technology Research (IJSTR) is an  
internationally scholarly refereed research journal which aims to promote the  
theory and practice of sciences, technology, innovation, engineering and  
management. Impact Factor: 3.023 - Provided by SJIFISSN 2277-8616*

#### C. Profil:



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Computational intelligence	Network Protocols
computer and microprocessor-based control	Network Sensor
Computer Architecture and Embedded Systems	Network-based automation
Computer Business	Networked vehicles applications
Computer Vision	Networking theory and technologies
Computer-based information systems in health care	Neural Networks
Computing Ethics	Neuro-Fuzzy
Computing Practices & Applications	Neuro-Fuzzy application
Congestion and/or Flow Control	Nonlinear and adaptive control
Content Distribution	Nursing information management
	On-board diagnostics
	Open Models and Architectures
	Open Source Tools

Context-awareness and middleware  
Creativity in Internet management and retailing  
Cross-layer design and Physical layer based issue  
Cryptography  
Data Base Management  
Data fusion  
Data Mining  
Data retrieval  
Data Storage Management  
Decision analysis methods  
Decision making  
Digital Economy and Digital Divide  
Digital signal processing theory  
Distributed Sensor Networks  
Drives automation  
DSP implementation  
Economics Theory  
E-Business  
E-Commerce  
E-Government  
Electronic transceiver device for Retail Marketing Industries  
Embeded Computer System  
Emerging advances in business and its applications  
Emerging signal processing areas  
Enabling technologies for pervasive systems (e.g., wireless BAN, PAN)  
Encryption  
Energy-efficient and green pervasive computing  
Estimation and identification techniques  
Evaluation techniques for middleware solutions  
Event-based, publish/subscribe, and message-oriented middleware  
Evolutionary computing and intelligent systems  
Expert approaches  
Facilities planning and management  
Flexible manufacturing systems  
Formal methods and tools for designing  
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Programming paradigms for pervasive systems  
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Quality of service and scheduling methods  
Real-time computer control  
Real-time information systems  
Real-time multimedia signal processing  
Reconfigurable, adaptable, and reflective middleware approaches  
Relay assisted and cooperative communications  
Remote health monitoring  
Remote Sensing  
Resource allocation and interference management  
RFID and sensor network applications  
Scalability of middleware  
Security and risk management  
Security middleware  
Security, Privacy and Trust  
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Sensor array and multi-channel processing  
Sensor fusion  
Sensors and RFID in pervasive systems  
Service oriented middleware  
Signal Control System  
Signal processing  
Signal processing in education  
Smart devices and intelligent environments  
Smart home applications  
Social and economic models for pervasive systems  
Social Networks and Online Communities  
Software Engineering  
Software engineering techniques for middleware  
Software evolution and maintenance in pervasive systems  
Speech interface  
Speech processing  
Standards and interfaces for pervasive computing environments  
Supply Chain Management  
System security and security technologies  
Technology in Education  
Theoretical Computer Science  
Transportation information  
Trust, security and privacy issues in pervasive systems  
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Ubiquitous Networks  
User interfaces and interaction models  
Vehicle application of affective computing  
Verifying and evaluating middleware  
Virtual immersive communications  
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## II. **Komentar Tentang *Jurnal Implementation Of Mining Exploration Activities And The Implication On Bioremediation Case In Rokan Riau Block In Legal Perspectives* sebagai berikut:**

### A. **Tujuan & Metode Penelitian**

1. Penelitian ini bertujuan untuk mengetahui tentang bagaimana menerapkan dan apa implikasi dari kegiatan eksplorasi pertambangan di Indonesia dalam perspektif hukum dengan studi kasus di PT. Chevron Pacific Indonesia (PT CPI). Dalam penelitian ini, aspek hukum penambangan yang digunakan adalah Pasal 1 Undang-Undang tentang Penambangan Mineral dan Batubara pada tahun 2009 yang berkaitan dengan, dan aspek hukum lingkungan yang digunakan adalah Pasal 40 ayat (1), Pasal 59 Ayat (4), Pasal 95 Ayat (1), Pasal 102 Undang-Undang Nomor 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan, Pasal 33 ayat (3) UUD 1945 dan Keputusan Mahkamah Konstitusi Nomor 18 / PUU-XII / 2014 tentang Pengujian Pasal 59 Ayat (4) , Pasal 95 Ayat (1), dan Pasal 102 Undang-Undang Nomor 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan menurut Undang-Undang Dasar Negara Republik Indonesia Tahun 1945 dan instrumen hukum internasional yang berkaitan dengan lingkungan.perspektif sistem hukum tentang kebijakan penyatuan harga bahan bakar (*unifying fuel pricing*) di Indonesia. Karena berbagai masalah bahan bakar di Indonesia seperti masalah hukum, penetapan harga dan memastikan pasokan, ketersediaan, dan kelancaran pasokan ke publik di pasar domestik, pemerintah wajib melakukan intervensi dalam menentukan harga bahan bakar dan pada saat yang sama menjamin ketersediaannya di pasar domestik.
2. Penelitian ini menggunakan metode yuridis normatif dan data kualitatif dan sifat penelitian ini adalah deskriptif. Metode penelitian ini menggunakan metode yuridis normatif, yaitu penelitian hukum yang dilakukan dengan memeriksa bahan pustaka atau data sekunder (Soekanto & Mamudji, 2006), dan analisisnya spesifikasi penelitian ini dilakukan dalam deskripsi, deskripsi adalah pengukuran dan pelaporan yang tepat dari karakteristik populasi atau fenomena yang diteliti

- (Babbie. 1986). Menurut Wu, Thompson, Aroian, McQuaid, dan Deatrick (2016), kunci untuk semua kualitatif metodologi adalah
3. bahwa berbagai perspektif yang menarik. Fenomena itu penting, dan perspektif itu adalah yang terbaik diturunkan secara induktif. Kemudian, sumber data yang digunakan adalah data sekunder yang mencakup bahan hukum primer (undang-undang yang memiliki kekuatan mengikat), bahan hukum sekunder (materi yang saling melengkapi), dan materi hukum tersier (dalam bentuk materi informasi hukum) yang kemudian dianalisis secara kualitatif dalam hal formulasi justifikasi melalui kualitas norma hukum itu sendiri, ahli pendapat / doktrin.

## B. Inti Permasalahan Penelitian

Siklus hidup penambangan dimulai dengan eksplorasi, berlanjut melalui produksi, dan diakhiri dengan penutupan dan lahan pasca-penggunaan (Teknologi dalam Eksplorasi, Penambangan, dan Pemrosesan <https://www.nap.edu/read/10318/chapter/5> , diakses 5 Februari 2019) Dalam konteks ini, pelaksanaan penambangan kegiatan eksplorasi dapat diartikan sebagai serangkaian kegiatan untuk mencari, menambang atau mengekstraksi, memproses, memanfaatkan dan menjual mineral (mineral, batubara, panas bumi, minyak dan gas). Kemudian, kegiatan eksplorasi pertambangan memiliki implikasi positif, dapat menciptakan lapangan kerja, memacu inovasi dan membawa investasi dan infrastruktur berskala besar dalam periode waktu yang lebih lama, sebagai kontributor utama pertumbuhan ekonomi dan pembangunan nasional serta kesejahteraan sosial. Menurut statistik Bank Indonesia di PricewaterhouseCoopers (PWC) Consulting Indonesia (2018), sektor pertambangan adalah salah satu sektor utama yang mendukung pertumbuhan ekonomi Indonesia selama beberapa tahun, memberikan kontribusi signifikan terhadap PDB Indonesia dalam bentuk ekspor, pendapatan pemerintah, pekerjaan, dan pengembangan ekonomi daerah-daerah terpencil di mana operasi penambangan berada (Sesprofessionals, 2018).

Di sisi lain, menurut Kamwanje (2018), implikasi negatif dari operasi penambangan dianggap memiliki lebih banyak dampak negatif secara keseluruhan pada masyarakat daripada dampak positif. Dalam hal ini, dapat diartikan bahwa implikasi atau dampak negatif dari operasi penambangan dalam jangka panjang, kerusakan lingkungan yang ditimbulkan pada semua fase proyek penambangan, yaitu sejak saat eksplorasi, pencemaran akibat pembuangan batuan sisa dan overburden, pengolahan bijih dan operasi pabrik, pengelolaan tailing (ampas limbah atau limbah yang mengandung zat beracun), infrastruktur (akses dan energi), dapat mengubah bentuk topografi dan kondisi tanah (dampak lahan) yang dapat mengubah keseimbangan sistem ekologi untuk daerah sekitar. Dengan demikian, orang menderita karena keberadaan lubang pembuangan kotoran, keluarga yang ditinggalkan, dan lingkungan hidup yang tercemar.



### C. Hasil Penelitian

Hasil penelitian adalah sebagai berikut:

1. Dalam perspektif hukum, aspek hukum pertambangan dan hukum lingkungan telah diatur dalam berbagai undang - undang dan peraturan. Misalnya sesuai dengan Pasal 1 angka 19 Undang-Undang Nomor 22 Tahun 2001 tentang Minyak dan Gas Bumi menyatakan bahwa Kontrak Kerja Sama adalah Kontrak Bagi Hasil atau bentuk lain dari kontrak kerja sama dalam kegiatan eksplorasi dan eksploitasi yang memberi manfaat lebih bagi negara dan hasilnya digunakan untuk kemakmuran rakyat yang sebesar-besarnya.
2. Aspek hukum lingkungan yang berkaitan dengan bioremediasi atau mengembalikan tanah yang terkontaminasi operasi dan eksplorasi, normalisasi fungsi tanah pascatambang, dan melakukan bioremediasi
3. diatur sesuai dengan Keputusan Menteri Lingkungan Hidup No. 128 tahun 2003 (Kepmen LH 128/2003) tentang Prosedur dan Persyaratan Teknis untuk Pengolahan Biologis dari Limbah Minyak Bumi dan Terkontaminasi Tanah oleh Petroleum. Keputusan LH 128/2003 ini mengatur peraturan terkait: (1)izin yang harus diserahkan oleh "pemilik" yang terkontaminasi tanah atau kontaminasi untuk diproses (2) konstruksi desain yang diperlukan untuk persyaratan pusat bioremediasi (3) untuk kondisi limbah sebelum diproses (4) pemantauan selama proses biodegradasi (termasuk pedoman pengambilan sampel), dan (5) persyaratan untuk relokasi lahan setelah pemrosesan terkait dengan persyaratan untuk inspeksi, relokasi dan pemantauan lahan setelah relokasi.
4. Aspek hukum lingkungan yang harus dipatuhi dalam kegiatan eksplorasi pertambangan di Indonesia semuanya berlaku peraturan dan hukum, sebagaimana diatur dalam Pasal 58 ayat (1), Pasal 59 ayat (4), Pasal 97, 98, 99, 100 dan Pasal 102 Undang-Undang Republik Indonesia No. 32 tahun 2009 tentang Perlindungan dan Manajemen Lingkungan. Menurut Rowley dan Schneider (2008: 227), hukum harus dibuat oleh legislatif, ditafsirkan oleh pengadilan, dan ditegakkan oleh cabang eksekutif pemerintah. Sejalan dengan pendapat Rowley dan Schneider, pentingnya penelitian ini adalah untuk memeriksa agenda yang sangat penting dan menjadi substansi, apakah PT Chevron Pacific Indonesia (PT CPI) telah mematuhi peraturan dan hukum yang berlaku dan peraturan di Indonesia, dan bagaimana seharusnya perusahaan bioremediasi di Blok Rokan Wilayah Riau secara hukum perspektif.
5. Implementasi dan implikasi dari Eksplorasi pertambangan PT Chevron Pacific Indonesia (PT CPI) di Blok Rokan Wilayah Riau secara perspektif hukum dapat diartikan sebagai kepatuhan perusahaan sebagai Pemegang Kuasa Penambangan dalam ketentuan Indonesia

6. Hukum dan regulasi. Kegiatan eksplorasi pertambangan di Indonesia harus dilakukan oleh industri pertambangan pada umumnya, dan PT. Chevron Pacific Indonesia (PT CPI) khususnya dalam perspektif hukum, mematuhi semua peraturan dan hukum yang berlaku di yurisdiksi Indonesia. Dengan cara ini pengelolaan limbah PT. Chevron Pacific Indonesia, yang diduga melanggar aturan UU Lingkungan Hidup, dapat dihindari. Pandangan ini sejalan dengan Abta (2006) yang menyatakan bahwa penggalan sumber-sumber kekayaan harus diusahakan dengan upaya dan strategi maksimal yang tidak merusak lingkungan dan prosedur hidup manusia perlu menggunakan teknologi ramah lingkungan dan dapat melestarikannya sehingga dapat dimanfaatkan secara berkelanjutan.