

Reducing Permitting Delays for Extractive Industries

Pennsylvania Aggregates and Concrete Association



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Reducing Permitting Delays for Extractive Industries

Regulatory Representation: The Philosophy of a Rhetorical Discipline

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Regulatory Representation - service provided by contracted or in-house experts acting in the interests of regulated parties involved in either compliance or permitting proceedings being *administered* and *arbitrated* simultaneously by regulatory entities

Strategic Regulatory Representation - a practical discipline in its own right which can be examined and understood via philosophy as a means to balance and control the regulatory process

Philosophy

a form of rational inquiry

involves critical reflection on the methods and presuppositions of a discipline

Rhetoric

study of effective or persuasive speaking or writing

investigate how language is used to organize information, construct meanings and create knowledge

Through philosophical inquiry, Regulatory Representatives can evaluate

- **the elements of Regulatory Representation**
- **why Regulatory Representation has been and is conducted the way it is**
- **the principles, strategies and specific methods involved**
- **how to improve the practice of representing a party in arbitrated venues**

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Extractive industries are among the most heavily regulated businesses in Pennsylvania

Changes to operations which require a permit, permit renewal, permit modification or permit revision represent a state of

High Risk
to operations and operators



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**Operational risks to extractive industries
derive almost exclusively from**

Unexpected Delays to Approvals

**whether at the local municipal level or at
state and/or federal permitting agencies**



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Unexpected Delays Derive From

Undue Agency Review Times

Public Objections

NGO Opposition

Legal Challenges



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Unexpected Delays Arise

During Permitting

During Municipal Approvals

As Objections to Permit Renewals

From Challenges to Approved Permits

From Third Party Actions



Unexpected Delays Accrue as a Result of the Un-Factors

Unbelievable Interpretations

Untrue Assertions

Unfounded Conclusions

Unwarranted Requirements

Unforeseen Objections

Uncertain Schedules

Unclear Expectations

Unpredictable Outcomes

**Which collectively result in
Uncontrolled Regulatory Processes**

And in the most undesirable outcome

Unremitting and Unaffordable Legal Proceedings



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Unexpected Delays Originate From Two Sources

1. Regulatory Entities: whether federal, state or local

- Associated with normal government processing of applications
- Are not wholly unexpected but can be unexpectedly protracted
- Unintentional Delays



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Unexpected Delays Originate From Two Sources

- 2. Objectors:** local residents, citizen's groups, watershed associations, preservation organizations, Non-Government Organizations (NGOs)
- Oppose almost all plans or actions of extractive industries
 - Come in the form of regulatory or legal challenges to permit approvals or to existing permits
 - Intent to prevent the planned action
 - Intentional Delays – result from filing of petition or legal complaint



Unexpected Delays result in a loss of control of the permitting process and consequently, of the planning for the operational change

geoResource Risk Reduction[®] a method whereby the operator can maintain control of

- **Regulatory review and response process**
- **Municipal proceedings**
- **Private party objections**
- **Legal actions**



Uncontrolled Regulatory Processes

Permitting process has two principal stages

Permit Application – prepared by Regulatory Representative

Application Review and Permit Approval – conducted by agency (possibly others)

**The fundamental philosophical question is:
At which stage does the process become uncontrolled?**

Examine Permit Applications

Permit application submittals consist of narratives, tables, figures, graphs - the latter of those relying on words in the narratives for explanations. Submittals, therefore, consist of

Words, Words, and more Words

**Shakespeare and the Philosophy
of Regulatory Risk Reduction**



In Shakespeare's play Hamlet, when asked by Polonius what it is he is reading, Hamlet replies

“Words, words, words.”



One of the three principal tools to reduce the risk of Unintentional Delays

(Regulatory Relevance & Report Organization)

Intentional Delays must be addressed almost exclusively using Words, Words, Words

Maintaining control of the permitting/regulatory process is the foundation of risk reduction

At the outset of any permitting effort, the permitting process is wholly in the control of the Regulatory Representative – all of the *words, words, words*, are theirs

Regulatory Representatives can lose control of the process if a reviewer/objector raises an issue about permit conditions, whether real or perceived, which was either not proactively addressed or not accounted for in the application – a deficiency



Maintaining control of the regulatory process is the foundation of risk reduction

If the application is deficient, reviewers/objectors, by default, assume control of the process, at which point they can and some times do:

- **request (demand) additional data**
- **modify compliance requirements**
- **disagree with conclusions made by licensed professionals**
- **require additional actions**

...placing the operator into a reactionary position and, consequently, no longer in control of the process

Maintaining control of the regulatory process is the foundation of risk reduction

Risk Reduction Objective:

To NOT lose the initial control while the application is being reviewed

The submittal itself must contain those elements which will prevent the shift of control from the operator to either the regulatory agency or to an objector

What are those elements?

“Aye, there’s the rub,” as Hamlet put it



Risks Accrue and Operators Lose Control Because The Words, Words, Words explaining Conditions, Plans and Potential Effects are...

Mis- **[** **Construed**
Understood
Communicated **]**

by:

Regulatory Agencies

Municipalities

Citizens

Civic Groups

NGOs

Opposition Counsel

Opposition Experts

Judges

Regulatory Representatives

M³ Syndrome



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Misconstruction results from one of two causes

1. A reviewer

- **lacks knowledge and experience**
- **reaches conclusions based on presupposition of conditions**
- **makes assumptions of what the report preparer's words mean**



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Misconstruction results from one of two causes

2. A reviewer

- has an inherent bias
- begins the review with a presumption of likely harm

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Misunderstanding, on the other hand, is a direct result of miscommunication on the part of the Regulatory Representative

Prepares of reports are uncomfortable with this fact

When faced with misunderstanding of their narratives, Regulatory Representatives many times default to Disparagement Rationalization

“The reviewer is being unreasonable.”

“The reviewer doesn’t get it.”



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I refer to this as the *Brutus Fallacy*

In Shakespeare's Julius Caesar, Marcus Brutus, bemoaning the great luck Julius Caesar experienced in his rise to ascendancy, was admonished by Caius Cassius

*The fault, dear Brutus, lies not
in our stars but in ourselves*



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We can't blame the reviewer for misunderstanding (or misconstruing)

The only things they *can possibly* know derive from the words, words, words in the narrative – the Regulatory Representatives' words

At the root, both Misconstruction and Misunderstanding derive from Miscommunication ... on the part of the Regulatory Representative

M³ Syndrome



M³ Syndrome

Preventing the M³ Syndrome is predicated on understanding:

The Player King's Dilemma

In Hamlet, The Player King observed

*“Our wills and fates do so contrary run; That our devices are overthrown;
Our thoughts are ours, their ends none of our own.”*

Translated into a permitting context

What we want and what actually happens are typically opposite

Our permit applications are not approved

**Because what we think we have said is not what is interpreted by
a reviewer**



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Misunderstanding has three causes

- 1. Unclear or jargon-ridden language in a narrative**
- 2. Absence of, or imprecise definitions/uses of terms**
- 3. Absence of context to the compliance matter at hand**



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Misunderstanding has three causes

1. Unclear or jargon-ridden language in a narrative

Self-explanatory

**Jargon, acronyms, and heavy reliance on technical terms
confuse reviewers**



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Misunderstanding has three causes

2. Absence of, or imprecise definitions/uses of terms

Even the most fundamental terms can have different meanings to different reviewers



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Apart from general misunderstanding of technical terminology on the part of reviewers, the mining regulations themselves create ambiguity

Ch 77 does not provide definitions of

- Hydrologic Regime
- Disturbance to the Hydrologic Balance
- Minimal Disturbance to the Hydrologic Balance
- Surface Water System
- Groundwater System
- Prevailing Hydrologic Balance
- Hydrologic Consequences

Different reviewers have license to interpret all of these terms, and others, according to their own understanding...

UNLESS WE DEFINE
THOSE TERMS

Despite the fact that operators must comply with the regulations which require operators to address those very factors which requires definitions of those terms



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By defining undefined or ambiguous terms the Regulatory Representative reduces the risk of incurring *Yorick's Impasse*. In Hamlet's famous graveyard scene, Hamlet says of the grave digger



“How absolute the knave is! We must speak by the card, or equivocation will undo us.”

In modern parlance we would say: We must not miscommunicate but must each use the exact meanings of every word, word, word or we will misconstrue and misunderstand each other on every point

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Misunderstanding has three causes

3. Absence of context to the compliance matter at hand

Specifically, what is the regulatory context within which the information must be interpreted

What is the Regulatory Relevance of each point

Recall that Regulatory Relevance is the second principal tool to reduce the risk of Unexpected Delays



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Regulatory Relevance

A permit narrative is not a technical document

By necessity, it includes technical information

It is a Regulatory Compliance Narrative

Explains how and why every aspect of the planned action is consistent with every regulatory requirement

Technical points are cast in light of Regulatory Relevance



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Providing the Regulatory Relevance of all technical points

- **prescribes an approval road map**
- **provides all information needed so a regulatory reviewer *can* approve the permit**
- **eliminates reviewer's dilemma and objector's leverage by pre-addressing and anchoring every possible consequence of mining activities in a demonstration of regulatory compliance**

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The third principal tool to reduce the risk of Unexpected Delays is Report Organization

A permit narrative is not a technical document so technical information can not be the organizing principle

The organizing principle is regulatory compliance



Report Organization:

Narrative Volume 1

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By proactively and methodically addressing all provisions in the statutes, regulations and guidance documents within the permit narrative, no reviewer can misconstrue or misunderstand

- **the regulatory relevance of every technical point**
- **that the planned activity is compliant with all applicable requirements**



**How can this be
accomplished in a
practical manner?**

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L³ Method[©]

Level the Playing Field

Leave No Question Unanswered

Leverage Authority



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L¹: Level the Playing Field

Define all terms and all uses

Identify all undefined terms and define them using

Applicable regulations

Other regulations

Statutes/Ordinances

Legal precedents

Literature

References

**Cross-References to all related terms and usages following
the same hierarchy (above)**



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L¹: Level the Playing Field

Define the ground rules

- **regulatory absolutes – objective requirements**
- **regulatory non-absolutes; non-objective criteria**
 - **technical**
 - **regulatory**

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L¹: Level the Playing Field

Establish Decision Rules

Possible Outcome No. 1: Tracer is detected in the deep confined groundwater wells and in the inflowing confined water in the upwelling points in the [REDACTED] (Figures 2 and 4a) but no-where else either within or outside the quarry

Necessary Conclusion No. 1: A direct hydraulic connection between the tracer introduction location(s) and the [REDACTED] would be established; the [REDACTED] Hypothesis would be confirmed; the [REDACTED] Hypothesis of Inflow would be shown to be incorrect

Possible Outcome No. 2: Tracer is detected in confined wells and in [REDACTED] inflow water and at other monitoring locations within the quarry

Necessary Conclusion No. 2: A direct hydraulic connection between the tracer input location(s), the [REDACTED] and other in-quarry inlets would be confirmed; the [REDACTED] Hypothesis would be confirmed but expanded to include hydraulic connection to the unconfined aquifer below the quarry; the [REDACTED] Hypothesis would be shown to be incorrect

From: Approved tracer test work plan



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L¹: Level the Playing Field

**There were six decisions rules
agreed to by all parties
precluded later interpretation**

**Agency reviewers subsequently questioned particulars of test execution
but the decisions based on the outcome were already made as defined by
the operator**



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L¹: Level the Playing Field

Establish conditions

Hydrogeologic regimes

Hydrologic Units

Pre-mining hydrologic conditions

Current hydrologic conditions

Leave no scope for speculation or assumption and no opportunity for reviewers to question or contradict conditions



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L¹: Level the Playing Field

Objective

Hold all other parties to the same standards, understanding and requirements imposed on the operator

Minimize potential for

**Unbelievable Interpretations
Untrue Assertions
Unfounded Conclusions
Unwarranted Requirements**



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L²: Leave No Question Unanswered

The questions which must be answered pertain to regulatory compliance

Technical issues are framed in regulatory requirements

Use the regulations as the guide to framing the universe of questions which must be answered



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L²: Leave No Question Unanswered

Objectives

- **Eliminate other parties' ability to “catch you off guard” on issues not addressed**
- **Pre-empt other parties from side-tracking the argument by raising seemingly relevant but extraneous issues**

How do you ensure that all relevant questions have been answered?



Report Organization:

Narrative Volume 1

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L³: Leverage Authority

An operator's conclusions are secondary to authoritative references which support a position or conclusion. The hierarchy is

- 1. Regulatory/Statutory**
- 2. Legal/Regulatory Precedent**
- 3. Academic References**
- 4. Industry References**
- 5. Operator's conclusion**



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L³: Leverage Authority

Objective

Reduce opportunities for any party to argue specifically with operator's representative

Present a technical case relying to the maximum possible on authoritative references

- **No findings are based on “professional judgement”**
- **Justifications for interpretations are based on regulations, regulatory/legal precedents, published literature**
- **No scope for disagreement with an operator's representative**



Example of Leveraging Authority

- Pennsylvania Geologic Survey, 1939:

“_____ Creek has its head waters in the slate regions and the lower course in the limestones and presents striking dissimilarities in their upper and lower portions [in that] in the slate regions there is a steadier flow and [the stream] seldom becomes entirely dry [whereas flow in] the limestones [is] apt to disappear during periods of drought, the diminished supply of water sinking into underground solution channels.”

_____, County, Pennsylvania: Geology, Geography; Pennsylvania Geologic Survey,
4th ser., Bulletin C48, 1939, Miller, J.

- Pennsylvania Geologic Survey, 1972:

“intensely fractured and weathered carbonates are characterized by hydrologic features such as springs, solution sinks, disappearing streams, artesian groundwater conditions,[and by] low flows in the middle and upper reaches of most streams crossing these [carbonate karst] rocks.”

Pennsylvania: Geology, Geography; Pennsylvania Geologic Survey,
4th ser., Bulletin C48, 1972, Wood, et. al..

- United States Geologic Survey, 2005:

“Even before development of the quarry, _____ Creek had been considered a losing stream until it crosses bedrock south of _____”
Jack Epstein, Ph.D., Dennis Low, Phillip Baird, in correspondence to PADEP pertaining specifically to the _____ Quarry;

- Pennsylvania Geologic Survey, 2006

“The _____ Creek is an alluvial ponor. It is a losing stream with a significant percentage of the stream waters in a state of divergence through alluvial and glacial sediments that cover a well-developed karst bedrock surface.”

From: Kochanov, 2006, in Geological Society of America, 41st Annual Meeting,

- Pennsylvania Fish & Boat Commission, 2018:

“The PAF&BC recognizes that the natural hydrology in _____ Creek is highly variable, consisting of sinks and springs, with certain sections of the stream only flowing during significant rain events.”

Correspondence from _____ (F&BC) to _____ (PADEP, Bureau of Mining)



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The objective of the L³ Method is to pre-resolve *The Player King's Dilemma* by scrupulously applying a combination of etymological rigor (words, words, words), regulatory relevance, technical acumen and authoritative support such that, after the application is no longer in your hands, you maintain control of the review process by having

- eliminated potential for reviewers to misconstrue or misunderstand
- eliminated opportunities for reviewers to object to or reject any conclusion
- prevented reviewers from reaching their own conclusions *ex initium*
- leveraged reviewers/objectors into a reactive position



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Reducing Regulatory Risk

A reviewer/objector who is in a position of having to react to proactive, positive conclusions demonstrably consistent with all regulatory provisions and supported by citation to authoritative sources, is not in a position to simply disagree or to request additional data without first documenting, from first principles, how and why the Regulatory Representative's conclusion is incorrect or insufficient

Conversely, if a Regulatory Representative fails to eliminate *The Player King's Dilemma*, they can be leveraged into reacting to issues raised by reviewers/objectors...at which point the representative is no longer in control



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Reducing Regulatory Risk

By applying a method such as L³® uniformly across all communication, operators can control

- **Reviewer/objector interpretations**
- **the approval process**

by providing no opportunity for a reviewer/objector to:

- **assume anything**
- **speculate about possibilities**
- **raise issues not addressed by the operator**
- **specify requirements for compliance**



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Regulatory Relevance

Permit reviewers are looking to check off the requisite boxes of their reviews

If a Regulatory Representative does not point out specifically which box each technical point checks off, the reviewer is left having to consider the point out of regulatory context at which point they are free to take issue with any technical point made by the representative

By grounding all data and all conclusions in their Regulatory Relevance, the scope of a reviewer's comments focused on either a concurrence or denial that the plan satisfies the minimal requirement of the regulation



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The dual objective is to

- 1. enable permit reviewers to accept the narrative as if it were as uncontentious as a Yes/No question on a form**

and

- 2. obviate the need for them to question the completeness of the application or the validity of any point made in the application**



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The most significant causes of Unexpected Delays are permit applications which

- **are difficult to read**
- **contain inconsistent or imprecise usage of terminology**
- **do not provide regulatory relevance**
- **are not organized around regulatory compliance**

The cause of delay is within the application itself



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Delays of approvals of such applications should not be Unexpected...

...but they are Unnecessary

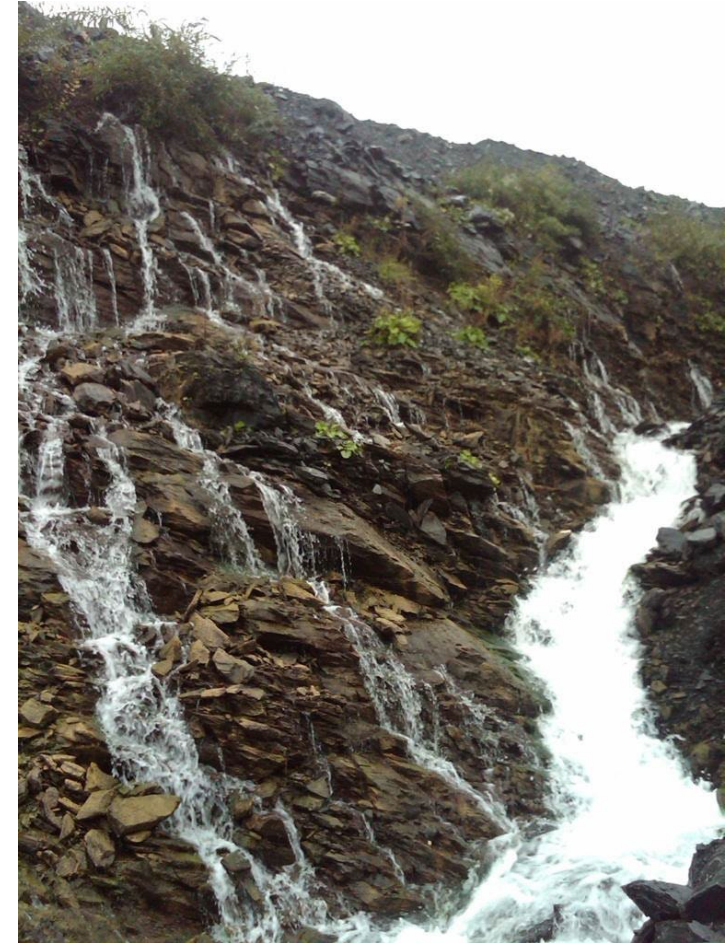
*“The fault, dear Brutus, lies not in our stars
but in ourselves.”*



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The effectiveness of gR³ is contingent on the
Regulatory Representative being

Unassailably
Correct



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If they are not unassailably correct, they run the risk of

Surrendering Control

The loss of control can occur when an issue has not been addressed, leaving the regulator or objector to dictate actions or terms

An even worse situation is when an issue is addressed but the representative is wrong



The ultimate objective of **geoResource Risk Reduction** is to

Prevent

- **Agencies**
- **Public Opposition Groups**
- **NGOs**
- **Boards of Supervisors**
- **Opposition Counsel**
- **Opposition Experts**

...from taking control



Re-posing the question:

At which stage does the regulatory permitting process get out of the Regulatory Representative's control?

Permit Application – prepared by operator
Application Review and Permit Approval –
conducted by agency (possibly others)

Re-posing the question

At which stage does the regulatory permitting process get out of the Regulatory Representative's control?

- ✓ **Permit Application – prepared by operator**
~~**Application Review and Permit Approval—**~~
~~**conducted by agency (possibly others)**~~

By a method such as **geoResource Risk Reduction**

Regulatory Representatives can present applications which must be considered compliant by:

Leveling the Playing Field

Leaving No Question Unanswered

Leveraging Authority

Leaving the reviewer no opportunity to say “No”



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Reviewers don't begin with the intent to say “No”

Delays from routine regulatory reviews are Unintentional

The reviewer can only say “No” if Regulatory Representatives fail to provide what the reviewer needs in order to say “Yes”



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Delays from objectors are Intentional

The objector begins with the intent to force a “No” from the regulators (or judges)

The objector can only pressure regulators to say “No” if Regulatory Representatives don’t provide, at the outset, in the permit application, the information a reviewer needs to eliminate the pressure points



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It is the role of Regulatory Representatives to not just provide the data and an explanation of them, but also to provide the regulatory road map of why and how permit reviewers can say “Yes”

... and to do that in a manner which makes the decision an easy one for reviewers in order to reduce permitting time frames



Through philosophic inquiry and critical reflection on the methods and presuppositions, Regulatory Representatives can evaluate

- **the elements of Regulatory Representation**
- **the principles, strategies and specific methods involved**
- **how to improve the practice of representing a party in arbitrated venues**

**Through rhetorical use of Words, Words, Words,
Regulatory Representatives organize information,
establish consistent meanings, ensure universal
comprehension and mediate power by maintaining
control of their clients' permitting process**

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**The outcome of a permit application can't
always be controlled...**

...but the regulatory process can be



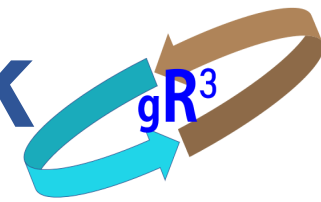
Control is maintained...

...by NOT surrendering it





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Managing the roadblocks to your
geo-resource operations so you can
focus on your core
business...**production**

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ENGINEERING & CONSULTING SERVICES
BUILDING ON A FOUNDATION OF EXCELLENCE