

Behavioral Strategies for Securing Land Access in Environmental Remediation Projects: A DISC-Based Analysis of Landowner–Land Representative Dynamics at PT Pertamina Hulu Rokan

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ABSTRACT: Securing land access for hydrocarbon-impacted soil (HIS) remediation remains one of the most persistent operational challenges for PT Pertamina Hulu Rokan (PHR), especially after the operatorship transition in 2021. Difficult Landowners (LOs) often delay or obstruct access due to behavioral, emotional, and trust-related factors, creating significant operational delays. This study applies the DISC behavioral framework—Dominance, Influence, Steadiness, and Conscientiousness—to analyze behavioral patterns of Difficult Landowners and Land Representatives (LRs) who negotiate land access in remediation work. Through qualitative interviews with LRs and DISC assessments of eight LRs, the study identifies recurring LO behavioral tendencies, reconstructs LO DISC profiles, and measures LO–LR compatibility. Results show that Difficult LOs display high Dominance and emotional reactivity, whereas LRs demonstrate high Steadiness and Conscientiousness. Compatibility scores ranged from 62.50%–81.25%, with Dominance emerging as the primary mismatch contributing to negotiation difficulties. The study introduces targeted DISC-based strategies to enhance LR negotiation effectiveness, build trust, manage high-D LO expectations, and accelerate land access acquisition. This research offers a replicable human-behavioral framework for operational negotiations in environmental remediation contexts.

KEYWORDS: DISC Model, Land Access, Negotiation Behavior, Environmental Remediation, Pertamina Hulu Rokan, Behavioral Strategy

I. INTRODUCTION

Environmental remediation is a critical component of PT Pertamina Hulu Rokan's (PHR) operational mandate in managing legacy hydrocarbon-impacted soil (HIS). These remediation efforts rely on obtaining temporary land access from private landowners. However, the process frequently encounters resistance, especially from Difficult Landowners who exhibit distrust, inconsistent decision-making, heightened emotional reactions, or repeated compensation demands—challenges evident across multiple remediation locations.

The complexity of land access is further intensified due to the historical transition from previous operators. Many landowners anchor expectations on past compensation norms, possess limited understanding of environmental remediation, or interpret access requests as potential threats to land control. As a result, PHR's Land Representatives (LRs) face prolonged negotiations, escalating operational delays, and increased stakeholder tension.

While organizational procedures, compensation structures, and regulatory frameworks have been standardized, the behavioral friction between LOs and LRs remains a major bottleneck. This highlights the need for a behavioral lens. The DISC model—categorizing Dominance (D), Influence (I), Steadiness (S), and Conscientiousness (C)—is a widely adopted tool to understand interpersonal tendencies, conflict behavior, and communication style alignment.

This research applies the DISC model to:

1. identify LO behavioral patterns contributing to land access challenges,
2. assess LR behavioral tendencies via formal DISC assessments, and
3. analyze LO–LR compatibility to design behavioral negotiation strategies.

By understanding these interpersonal dynamics, PHR can improve LR preparedness, strengthen negotiation outcomes, and accelerate remediation timelines.

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II. RESEARCH QUESTION, OBJECTIVES, SCOPE AND LIMITATION

A. Research Question

1. What DISC personality profiles are exhibited by Difficult Landowners (LOs), and what DISC profiles characterize the Land Representatives (LRs) who negotiate with them?
2. How well do the DISC profiles of Land Representatives align with those of the landowners they engage with?
3. What behavioral and negotiation strategies do Land Representatives employ to effectively approach and influence landowner decision-making?
4. What strategies do companies employ to recruit and develop suitable Land Representatives for effective engagement with landowners?

B. Research Objectives

1. To determine the DISC personality profiles of both landowners and Land Representatives involved in environmental remediation negotiations.
2. To assess the degree of compatibility (match score) between LO and LR DISC profiles and its potential impact on negotiation outcomes.
3. To analyze the negotiation strategies employed by LR and how these strategies are influenced by their DISC profiles.
4. To provide actionable recommendations for improving LR performance and training programs, based on behavioral profiling and effective negotiation strategies.

C. Scope and Limitation

1. **Geographical Scope:** The study focuses on land access negotiations for environmental remediation (HIS cleanup) within the operational areas of PT Pertamina Hulu Rokan.
2. **Data Type:**
 - LO behavior is reconstructed indirectly from LR interviews, as landowners do not complete DISC assessments.
 - LR DISC profiles are measured directly using formal DISC tests.
3. **Thematic Scope:**
 - The study focuses on behavioral dynamics, not legal, financial, or regulatory aspects of land access.
4. **Stakeholder Scope:**
 - Analysis is limited to private landowners involved in remediation-related land access cases, excluding land acquisition for drilling, infrastructure, or construction.
5. **Limitations:**
 - Behavioral interpretations may vary across LR.
 - DISC categorizations remain models; some nuances of human behavior extend beyond DISC quadrants.

III. METHODOLOGY

This research adopts a mixed-methods design combining qualitative interviews, behavioral reconstruction, and quantitative DISC assessment. The methodological structure was adapted to ensure alignment with the behavioral nature of the study while mirroring standardized academic research frameworks.

A. Research Design

The research consists of three sequential components:

1. **Qualitative Phase:**

Interview sessions were conducted with Land Representatives (LRs) to extract detailed behavioral observations of Difficult Landowners (LOs) encountered during land access negotiations.
2. **Quantitative Phase:**

Eight LR completed a formal DISC assessment to map their behavioral tendencies across the Dominance–Influence–Steadiness–Conscientiousness dimensions.
3. **Compatibility Analysis:**

LO behavioral profiles were reconstructed based on observed patterns. Compatibility scores between LO and LR DISC profiles were calculated and interpreted using established behavioral fit principles.

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B. Data Collection

1) Interviews with Land Representatives

Semi-structured interviews were conducted to gather:

- recurring LO behaviors,
- emotional responses,
- decision-making tendencies,
- patterns of resistance,
- communication style mismatches.

These interviews served as the foundation for reconstructing LO DISC profiles.

2) LR DISC Assessment

Eight LRs participated in DISC personality testing.

Assessment covered:

- intensity of each quadrant (D/I/S/C),
- dominant and subdominant traits,
- behavioral tendencies under stress,
- communication and conflict-handling style.

Raw scores were translated into DISC quadrants using the standard Marston framework.

3) Behavioral Compatibility Evaluation

Compatibility was measured across all four DISC dimensions:

Match Score

=

$$\left(\frac{\text{Aligned Traits}}{4} \right) \times 100\%$$

Scores were categorized as:

- **80–100%: Good Match**
- **60–79%: Pretty Match**
- **40–59%: Weak Match**

This approach is consistent with behavioral fit literature.

C. Data Analysis Procedures

The analysis followed four stages:

1. **Coding of Interview Data**
Behavioral indicators were coded into DISC-consistent themes: assertiveness, emotional response, consistency, rule-orientation, and social influence.
2. **Aggregation of LO Behavioral Patterns**
Themes were grouped to create LO DISC profiles for each case.
3. **Comparison with LR Profiles**
Each LO–LR pair was evaluated dimension by dimension.
4. **Strategy Derivation**
Behavioral gaps were translated into practical negotiation strategies for LRs, based on DISC communication principles.

D. Ethical Considerations

- LRs participated voluntarily and anonymously.
- LO names and locations were anonymized.
- No financial or compensation data were collected.

IV. RESULTS AND DISCUSSION

This section presents the findings on LO and LR behavioral patterns, their compatibility scores, and the implications for negotiation strategies in environmental remediation.

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A. Behavioral Profile of Difficult Landowners (LOs)

Interviews revealed consistent behavioral indicators across Difficult LOs. These behaviors were mapped into DISC dimensions.

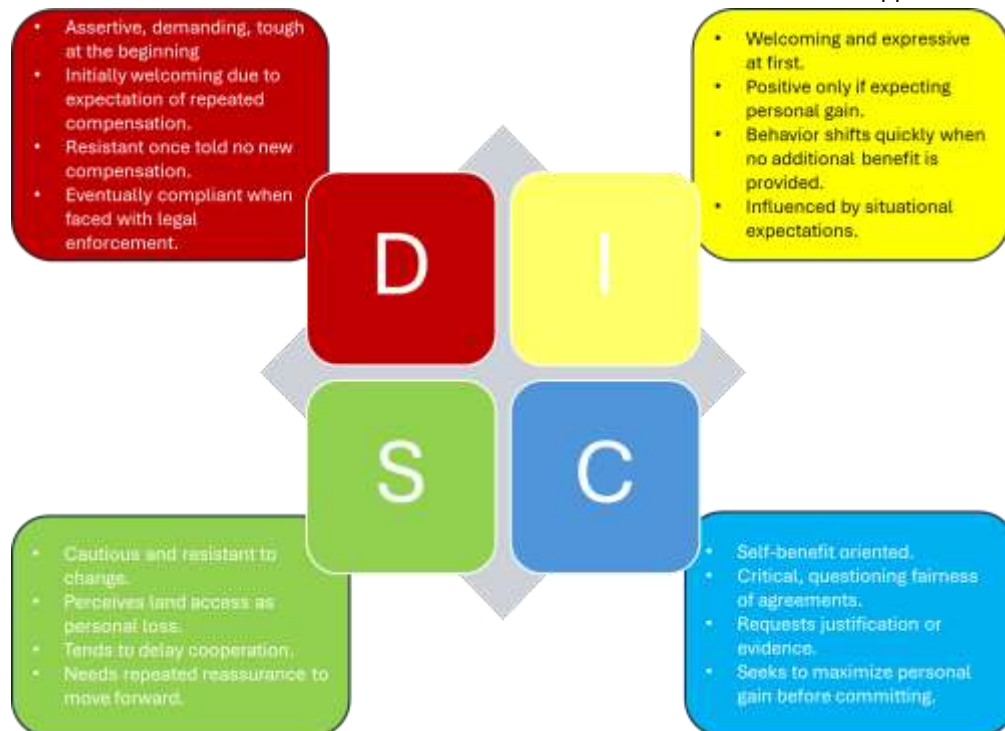


Figure 1. Behavioral Indicators of Difficult Landowners

Dominance (D3 indicators):

- Demanding tone, challenging LR explanations
- Frequent renegotiation attempts
- High assertiveness, refusal to be pressured

Influence (I2 indicators):

- Emotion-based decisions
- Easily influenced by neighbors/family
- Sensitive to LR's attitude and tone

Steadiness (S2 indicators):

- Inconsistent decisions across visits
- Difficulty committing
- Anxiety toward unfamiliar processes

Conscientiousness (C2 indicators):

- Skepticism toward procedural requirements
- Selective acceptance of documentation
- Distrust of institutional authority

LOs generally presented a **D3–I2–S2–C2** behavioral pattern—high Dominance, moderate emotionality, low consistency, and low procedural trust.

B. Behavioral Profile of Land Representatives (LRs)

DISC testing of eight LRs produced highly consistent patterns.

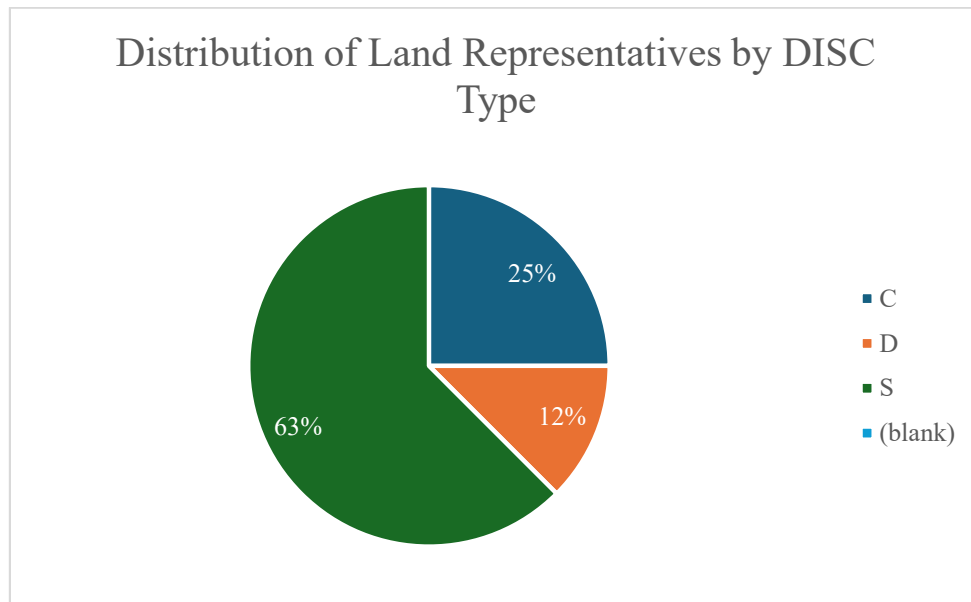


Figure 2. LR DISC Profile Distribution

Dominance (D1):

- Low assertiveness
- High patience, avoids confrontation

Influence (I2):

- Adequate social engagement
- Ability to build rapport

Steadiness (S3):

- Strong consistency, empathy, listening
- Supportive communication style

Conscientiousness (C3):

- High structure and detail orientation
- Reliance on SOPs and formal rules

LRs exhibited **D1–I2–S3–C3**, making them stable but less dominant negotiators.

C. LO-LR Compatibility Matrix

Table 1 summarizes compatibility between LO and LR DISC quadrants.

Table 1. LO–LR Compatibility Matrix

DISC Dimension	LO Score	LR Score	Compatibility	Explanation
Dominance	3	1	Low	LO expects assertiveness; LR shows calm de-escalation
Influence	2	2	Very High	Both engage socially at similar levels
Steadiness	2	3	High	LR stabilizes LO emotional variability
Conscientiousness	2	3	High	LR's structure compensates for LO's low rule adherence

Overall Match Score:

62.50%–81.25%, categorized as *Pretty Match* to *Match*.

The primary mismatch is **Dominance**, often leading to:

- perceived lack of authority,
- escalation to supervisors,
- prolonged back-and-forth communication.

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D. Behavioral Dynamics in Negotiation

Behavioral friction manifested in several ways:

1. **Emotional Escalation**
High-D LOs interpret LR politeness as weakness.
2. **Repeated Renegotiations**
LO emotional inconsistency (S2) collides with LR procedural rigidity (C3).
3. **Distrust of Procedures**
LO's low C conflicts with LR's procedural explanation style.
4. **Reliance on Social Influence**
Family/neighbor opinions can override LR explanations.

E. Negotiation Behavior Flow

1. LR visits → LO expresses skepticism
2. LR explains process (C3 communication)
3. LO challenges compensation or intent (D3 reaction)
4. LR de-escalates (S3 behavior)
5. LO delays decision again (S2 inconsistency)
6. LR repeats clarification on next visit
7. Escalation may occur if no convergence

F. DISC-Based Behavioral Strategies

To address mismatches, the following strategies were derived.

1. High Dominance (D3):

- Use firm, concise language
- Present 2–3 clear options
- Avoid circular explanations
- Demonstrate competence early

2. Moderate Influence (I2):

- Keep conversation warm but structured
- Use positive reinforcement
- Acknowledge their concerns verbally

3. Low–Moderate Steadiness (S2):

- Provide written summaries
- Clarify step-by-step process
- Reassure them of minimal disruption

4. Low Conscientiousness (C2):

- Minimize technical jargon
- Use visuals, before–after photos
- Explain ONLY the critical procedures

G. Discussion: The Role of Behavioral Fit in Land Access

The findings highlight that:

- Land access challenges are driven more by behavioral mismatch than procedural flaws.
- LR's behavioral strengths (S3 & C3) make them ideal stabilizers but poor negotiators with high-D LOs.
- Dominance mismatch is the most critical gap—LOs need firmness, while LR's instinctively avoid confrontation.
- DISC-informed strategies significantly reduce misunderstanding and accelerate access.
- Behavioral alignment is thus a predictor of negotiation success, supporting both DISC theory and Person–Environment Fit models.

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V. CONCLUSIONS

This research analyzed the behavioral dynamics between Difficult Landowners (LOs) and Land Representatives (LRs) in environmental remediation projects at PT Pertamina Hulu Rokan using the DISC behavioral framework. Through qualitative interviews and formal DISC assessments, four key conclusions were drawn:

1. Difficult Landowners commonly exhibit high Dominance and emotional reactivity.

LOs frequently show D3 tendencies—assertiveness, resistance, and demands for control—combined with moderate emotional influence (I2). Low steadiness (S2) and low conscientiousness (C2) create inconsistent decision-making and skepticism toward procedures.

2. Land Representatives predominantly display Steadiness and Conscientiousness.

LRs consistently scored high on Steadiness (S3) and Conscientiousness (C3), indicating reliability, empathy, and structured communication. However, low Dominance (D1) limits their ability to handle confrontational negotiations effectively.

3. LO–LR compatibility ranges from moderate to good but reveals critical gaps.

Match scores between 62.50% and 81.25% indicate partial alignment. The biggest gap lies in Dominance: high-D LOs expect firmness, while low-D LRs offer patience and compliance. This mismatch contributes to prolonged negotiation cycles and perceived LR weakness.

4. DISC-based strategies can significantly improve negotiation outcomes.

Behavioral alignment tools—such as firm language for high-D LOs, warm rapport for I2 LOs, written summaries for low-S LOs, and simplified procedures for low-C LOs—help LRs strengthen negotiation clarity, build trust, and accelerate the land access process. Overall, the study demonstrates that behavioral fit is a central determinant of negotiation success in land access for remediation. By incorporating DISC-based behavioral training, PT Pertamina Hulu Rokan can enhance LR effectiveness, reduce operational delays, and establish a more strategic approach to stakeholder management.

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