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July 1, 1988

The Honorable Robert S. Drew Chief Administrative Law Judge New York State Department of Environmental Conservation Office of Hearings, Room 409 50 Wolf Road Albany, New York 12233

Dear Judge Drew:

Enclosed are the comments of the Independent Oil and Gas Association of New York on the Draft Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program.

We will be happy to answer any questions or provide additional information if desired.

Thank you for the opportunity to comment.

Sincerely.

Mary Mietus Executive Director

Enc.

Independent
Oil & Gas Association

of

New York

#### COMMENTS

of the

INDEPENDENT OIL & GAS ASSOCIATION OF NEW YORK, INC.

on the

DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT ON THE OIL, GAS AND SOLUTION MINING REGULATORY PROGRAM

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## SUMMARY

## of the Technical Comments

prepared by:

INDEPENDENT OIL & GAS ASSOCIATION OF NEW YORK, INC.

on the

DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT ON THE OIL, GAS & SOLUTION MINING REGULATORY PROGRAM

JUNE 1988

# OUTLINE OF COMMENTS

on the

## DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT

- 1) Summary of Technical Comments
- 2) Technical Comments
- 3) Glossary
- 4) Comments on Appendix 4
- 5) Attachment ‡1 Impact of One-Time Dormant Season Application of Gas Well Brine to Forest Land
- 6) Attachment #2 IOGA's Proposed Revisions to the Well Drilling and Completion Form
- 7) Attachment #3 Liability Risks of Free Gas Clauses
- 8) Attachment ‡4 Comments of IOGA President Arthur Van Tyne

Independent Oil & Gas Association of New York (IOGA) is a not-for-profit trade organization representing oil and gas producers, contractors, allied service companies and suppliers, and professionals who serve that industry. At the present time, IOGA has 250 members.

A committee of IOGA members, including engineers and geologists with extensive experience in oil and gas operations, has reviewed every page of the draft GEIS. The committee met several times and conducted the technical review which forms the basis of our comments. In addition to the work contributed by the committee, IOGA sought advice from its Legislative/Legal Committee, its Board of Directors and other industry members.

We want to take this opportunity to express our firm belief that the framework of existing law and regulations, when coupled with existing permit conditions, are more than adequate to protect the environment and regulate the oil and gas industry. Much of what now exists as permit conditions should be adopted as regulations. In this regard, IOGA supports the DEC's desire for a more evenly administered, uniform regulatory program as evidenced by the numerous recommendations made in the GETS.

Listed below is an overview of some of the points we wish to stress, and some of the areas of concern to the industry that we feel must be addressed.

First, we note that this is the general industry's first formal and direct opportunity to review and comment on the draft GEIS even though the DEC has taken several years to prepare the document. In any project of this size, there are bound to be some discrepancies or oversights. However, on the whole, we feel an honest effort has been made by the agency to accurately depict New York's oil and gas industry from its beginning up to the present time.

Second, IOGA disagrees with the present GEIS format in which the agency makes lengthy and detailed proposals for future recommended legislation, rules, regulations, permit conditions and mitigating measures. We firmly believe the GEIS should only cover: 1) the history of the industry; 2) the current operating procedures and the technical advances of the industry; and 3) the present body of law, regulations, rules and permit conditions and mitigating measures imposed on the industry to protect the environment.

Third, we make the following comments, not as criticisms, but as our sincere belief that these areas will need to be addressed differently than they are in the draft GEIS. Such action will allow our industry to continue to function as it must to develop the State's resources in a responsible manner

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8) Visual impacts as a whole are subjective, and the creation of a visual standard cannot help but lend itself to arbitrary imposition. What is visually repugnant to one person may be beautiful or interesting to another. An activity such as logging may disturb certain segments of the public, who hate to see trees cut, but the owner of the trees should still be allowed to dispose of them as he desires. Even though some people may be bothered by this, the visual impact is not permanent. Similarly, most visual impacts of oil and gas operations occur during the drilling phase which is temporary. Once a well is drilled and the land reclaimed, the visual impact is negligible. References to visual impacts are not germane to a GEIS and should be removed from this document.

9) Statements made in the GEIS imply that soil is a commonly held natural resource, similar to air and water. This concept is then used to justify regulation of private property. We disagree that soil is a commonly held natural resource requiring special protection by the DEC in every instance. Earth disturbance regulations should only be allowed which prevent excessive siltation of surface waters, which are a protected, commonly held resource.

I-10 10) Several sections of the GEIS refer to changes that will occur in the future, but which, in fact, have already taken place. These sections should have been revised before the document was released for public comment.

Finally, the GEIS is of critical importance to our industry. The outcome of these hearings and the final decisions made on the GEIS will affect New York's oil and gas industry for many years to come. It is vital to the life of our industry that the final document addresses our concerns.

- I-8 The DEC agrees that the visual impacts from a properly sited and reclaimed drilling operation are neglible and temporary, but these impacts, however limited, must be addressed under SEQR regulations. See Topical Response Number 2 on Visual Resources and Assessment.
- I-9 See Topical Response Number 7 on Soil as a Public Natural Resource.
- I-10 The extensive lead time required for printing and distributing a document the size and scope of the GEIS precludes it being absolutely up to date.



which will protect our environment and the rights of the landowner and the operator, as well as continue to provide jobs, tax dollars, royalty payments and other benefits associated with oil and gas development.

- 1) State actions in the form of regulations or permit conditions can effectively prohibit the mineral owner's right to recover his oil and/or gas reserves. Should this occur, we believe the involved parties should be financially compensated by the State for the unrecoverable reserves at full market value.
- 1-2 2) There should not be separate rules for State-owned land. The oil and gas regulations or permit conditions applicable to privately owned land or resources should also apply to resources owned by New York State.
- 1.3] 3) The DEC does not have the legal right to impose itself as a third party in landowner/operator contracts. Numerous statements made in the GEIS are governed by contractural agreements, and DEC involvement here would be an infringement of landowner rights.
- 1-4 4) We do not believe access roads should be regulated by the DEC because: a) this is a contractural matter between the landowner and the operator; and b) such access roads are not regulated in other industries such as timbering or agriculture.
- 1-5 5) The GEIS makes reference to safety concerns of oil and gas operations. The safety of such activities is already regulated by the New York State Department of Labor, the federal Department of Labor, OSHA and MSHA. We believe the DEC should defer to the more than adequate standards and regulations developed by these other agencies which are already in place.
- 6) We are in agreement with the present casing and cementing guidelines, but we disagree with the use of grouting as a means of protecting freshwater aguifers. Although this is a (very technical point, we mention it here because grouting often appears in the GEIS as a means to protect freshwater aquifers and we do not believe it will achieve the DEC's objective.
- I-7 7) All well drillers, including water well drillers, should be regulated to ensure comprehensive and adequate protection of freshwater aquifers. Regulation should be extended to anyone who penetrates the groundwater zone for whatever reason.

I-1 The mineral rights owner cannot exercise his right to recover oil and/or gas reserves at expense to the environment or at expense to resources held in trust for all citizens of the State. See Topical Response Number 1 on Public Taking Without Compensation.

The oil and gas regulations and permit conditions, such as casing and cementing guidelines, which are applicable to privately owned lands are also applicable to State-owned land. There are additional conditions that the State as the landowner can impose in the leases granted to develop the resources on State owned lands. Any landowner or lessor, including the State may impose contractual obligation in the lease to protect its interest(s).

I-3 The DEC does not have the right nor does the DEC impose itself as a third party in landowner/operator contracts. However, the DEC does have the right and obligation to protect the State's natural resources for the benefit of all its citizens. Some programs that protect natural resources (e.g. tidal wetlands, freshwater wetlands, stream disturbance permits, etc.) are also viewed by many landowners, as well as the oil and gas industry, as an infringement of individual and landowner rights, but State protection and regulation of these important common resources has been upheld in the courts.

I.4 Access roads are regulated for other industries whose actions require a
State permit. Under SEQR, access roads are considered "part of the
action" to drill a well. See Topical Response Number 4 on Access Roads
as Part of Project.

I-5 DEC must regulate safety in circumstances where failure to do so could have a deleterious effect upon the environment. Blowout prevention and control is one such circumstance. With respect to non-environmental safety concerns, the intent of the GEIS is to encourage adherence to safety guidelines rather than to propose specific safety regulations. OSHA does not have drilling rig safety regulations. They do have guidelines, but there is no federal safety inspection staff to enforce their guidelines, "Comprehensive Safety Recommendations for Land-Based Oil and Gas Well Drilling". The State Department of Labor (DOL) has adopted the federal safety regulations, but as stated above there are no federal drilling rig safety regulations, and the DOL does not make drilling rig safety inspections in New York State.

I-6 As stated in the text, grouting is commonly used in shallow surface holes as a means of protecting freshwater aquifers from infiltration of surface contaminants. It does meet this limited objective. Support for adopting the present casing and cementing guidelines as regulations is noted.

I-7 The DEC also supports regulation of water well drillers. Legislation is

needed to accomplish this goal.

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TECHNICAL COMMENTS

CR-6

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# I. INTRODUCTION

- 1-11 l-1, 3rd para., last sentence: DELETE phrase "beneath his land", REASON: May not be "his" land; minerals might have been severed from surface.
- i-12 1-2, 1st full para., line 3: phrase "discretionary approval such as granting of permits." COMMENT why "discretionary"? If operator agrees to comply with regulations and has financial security, does the DEC have discretionary authority?
- 1-2, last para., line 2: COMMENT The GEIS has been expanded to include proposed recommendations which may be enacted after the GEIS is approved and adopted. We feel the inclusion of proposed regulations in the GEIS to be inappropriate and that the document, when finally adopted, should contain only the requirements necessary to allow an operator to be issued a permit. It may have been more appropriate to include the proposed recommendations for changes to the regulatory program in an appendix to the GEIS until each is approved and adopted.
- 1-3, 2nd para., line 9: COMMENT: socioeconomic impacts this was the <u>only</u> information requested from the regulated community, contrary to claims made by others that industry wrote the GEIS.

#### II. DESCRIPTION OF PROPOSED ACTION

- 1-15 2-1, 2nd para., line 12: DELETE sentence "A review is made of viable alternatives...". REASON: Many alternatives that could have been considered were not, or at least they are not discussed in this document. What are these undiscussed alternatives?
- 1-16 2-2, 1st para., line 5: DELETE: "in part", REASON: The GEIS should cover all actions except those specifically exempted on page 3-3, #1-8.
  - III. MAJOR CONCLUSIONS ON THE APPLICATION OF THE STATE ENVIRONMENTAL QUALITY REVIEW ACT TO THE OIL, GAS AND SOLUTION HINING LAW.
- 1-17 3-2, B, line 6. AGREE with the statement that permitting oil and gas wells is a "non-significant action," as the drilling process is a temporary disturbance of the environment and the current regulatory program provides adequate safeguards against future significant environmental impacts once the well is drilled and in production.

- I-11 Deletion of the phrase "beneath his land" does not substantially change the intent of this paragraph. See Appendix 4, pages 1-2 for details on mineral rights severance.
- I-12 Most State issued permits are discretionary. With a non-discretionary permit, only an application and fee are needed for automatic granting of the permit (e.g. fishing permit). "Discretionary" in reference to oil and gas drilling permits means that a review and judgment must be made by the Department before the permits are issued. Therefore, a permit is not automatically issued when the application and fee are submitted.
- I-13

  As stated, the proposed changes to existing regulations were included so that a full public discussion of all the issues could be made. Many of the proposed regulations are currently imposed as permit conditions because they are critical to environmental protection, and a negative declaration could not be issued without them. It is Department policy to formalize standard permit conditions into regulation as soon as possible. In addition, a GEIS must assess the environmental impact of a regulatory program and determine what changes are needed to strengthen the program. See Topical Response Number 5 on Reasons for Including Proposed Regulations in the GEIS.
- I-14 Industry personnel were present at the GEIS public scoping hearings where GEIS outlines were distributed for public comment. Industry had the same opportunity to respond as the public. In addition, in 1982 DEC met with IOGA to obtain information on standard oil and gas industry practices and concerns.
- I-15 A full range of regulatory alternatives is discussed in Chapter 21, from prohibition of resource development to maintenance of status quo. If the commentators want discussion of a specific alternative, it should be identified and submitted.
- I-16 The GEIS was developed to satisfy SEQR requirements and does serve as an EIS for all standard operations when they conform to the thresholds described in Table 3.1. Conformance of these standard operations to the thresholds in the table cannot be determined without the Environmental Assessment Form (EAF) which details the unique physical conditions of each drilling site. See Topical Response Number 3 on EAF and Site-Specific Permit Conditions.
- I-17 Certain parts of this sentence when taken out of context can be misconstrued.

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- 1-18 3-3, top line: ADD the word "supplemental" before "environmental assessments"
- 1-19 3-3, #1, CLARIFY: is the "two and one-half acre disturbance" for each well? If so, ADD the phrase "per well" after two and one-half acres.
- 1-20
  3-3, \$2, DELETE \$2, REASON: Disagree with the need for a specific supplemental environmental assessment for State parklands and the perceived need to treat the State differently than other surface owners.
- 1-21 3-3, \$3, LIST other possible DEC permits which may be necessary. We feel that the Division of Mineral Resources should have the ability to streamline the permitting process and should be able to provide all necessary permit approvals. Not only has applying to different DEC divisions for permits been costly and time-consuming, but the divisions have had conflicting requirements and have required producers to submit material already submitted to another division, thereby increasing costs and length of time needed to secure permits.
- 1-22 3-3, §5: CLARIFY the term "major" used in this context, i.e., how many wells? Existing federal permitting requirements would answer many concerns for new waterflood projects. In regards to surface environmental disturbance, there is not a change in the type of disturbance only in the degree. Therefore, the GEIS should apply with a few modifications to cover surface disturbance for multi-well projects.
- 1-23 3-3, #6, same comment as #5 above.
- 1-24 3-3, \$7, DEFINE "major" in this context.
- 1-25 3-3, #8, DELETE this statement. REASON: It is a catchall phrase and too vague. The GEIS is intended to be specific to the oil, gas and solution mining industry and "any other project" would probably not fall within, or be subject to, the conditions of the GEIS.
- 1-26 3-3, 2nd para., \$3. DELETE \$3. REASON: We do not believe the reason stated should constitute the standard for a Type I action unless the <a href="State">State</a> holds the mineral rights within or contiguous to <a href="any publicly-owned">any publicly-owned</a> park land. The taking or controlling of private mineral rights by regulation is unjustified.
- 1-27 3-4, para 1, DELETE this paragraph. REASON: We do not believe the location of the well should be a matter of concern for the DEC, but rather a private contractural agreement between the landowner and the operator. Further, although some leases may have been written without current landowner approval, the current landowner was aware of the lease agreement when the property was purchased. The current landowner has probably realized benefits as a result of the lease either through royalties, sale of the

- I-18 The word "supplemental" should be inserted.
- I-19 The statement is more correct as written. Usually, one well is defined as a project, but there are multi-well projects which are exceptions to this rule.
- I-20 There are reasons that State Parklands are treated differently. These lands are usually of some special scenic, historic or environmental value and are held in public trust for the benefit of all citizens.
- I-21 Streamlining the permitting process is a goal of good government, but Mineral Resources staff does not have the expertise to evaluate potential impacts on environmental resources such as wetlands and streams. Responsibility for these other statutory programs is assigned to other DEC Divisions. The Division of Regulatory Affairs in each Regional Office is responsible for coordinating the review of permit applications for those actions governed by the permit procedures set forth in the Uniform Procedures Act (UPA) ECL Article 70 and 6NYCRR Part 621. Article 23 well drilling permits are not governed by the UPA; however, such permits as those for wetlands disturbance stream crossing and brine waste hauling are governed by the UPA review procedures. Those procedures require that all permits subject to UPA provisions and relevant to a proposed action be simultaneously reviewed by the Department.
- I-22 "Major" in this context means more than one well or a multi-well project.

  "Major" could be removed from this item without changing the intent. The federal permitting requirements do not supersede State requirements. We agree that the existing federal USEPA UIC permitting requirements would answer many of the technical concerns, but they do not address surface environmental impacts. Multi-well projects can trigger SEQR thresholds. If these thresholds are triggered, Part 617 regulations apply.
- I-23 Under Federal Energy Regulatory Commission (FERC) requirements, environmental impacts must be addressed. FERC does not have this requirement for all expansions and increases in storage capacity. The federal permitting requirements and environmental assessment can satisfy many State concerns, but they do not supersede State requirements. See response to I-22.
- I-24 See response to I-22,
- I-25 We agree that the wording should be changed to "Any other project regulated by the Oil, Gas and Solution Mining Law..."
- I-26 The wording in the GEIS comes directly from Part 617.12 of the SEQR regulations. It applies to all publicly owned parkland, not just State parkland.

| l    | minerals or reduced cost of the land surface due to mineral severance.   |
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| 1-28 | GENERAL COMMENT FOR PAGE 3-4: Granting of rights to the surface owner by regulations when the mineral rights were not purchased in the deed to the surface is unjustified and amounts to confiscation of the mineral owner/operator property.  |
| 1-29 | 3-5, D.: DELETE first paragraph. REASON: Once the GEIS is approved, it should stand as the set of conditions with which operators must comply to be issued permits. As new regulations are promulgated and enacted, they can be included as part of the GEIS. In the meantime, special conditions are now added to permits, and have been for some time, to ensure that drilling is a non-significant SEQR action. |
| 1-30 | 3-5, 0. para 2. COMMENT: Once the GEIS is in place, the EAF $\frac{\text{shoul}\hat{\sigma}}{\text{GEIS?}}$ be eliminated. Otherwise, what is the purpose of the   |
| 1-31 | 3-6, line 1, 1st sentence: DELETE the word "application" and substitute "GEIS".  |
| i-32 | 3-6, line 2, DELETE the word "revised" and replace with "adopted".   |
| 1-33 | 3-5a, Table $2\text{-}1$ , b & c: COMMENT: If the State is not the minerals owner, these sections should be removed.   |
| 1-34 | 3-5b, Table 3-1,j,k,l. COMMENT: These project are not different in kind from single well projects, just in degree. Also, adequate federal regulations are now in existence.  |
| 1-35 | 3-6, ‡2, CHANGE "EAF" to "permit application". REASON: The new permit application form, when approved, will request environmental assessment information.  |
| 1-36 | 3-6, \$3, COMMENT: on pg. 3-3 note that page 3-6 should be referenced.   |
| 1-37 | 3-6, <b>14</b> , CLARIFY or give an example of a "supplemental finding statement."   |
| 1-38 | 3-7, 2 para. line 1: DEFINE "major", i.e., number of wells, etc.   |
| 1-39 | 3-8, #2, line 2: DELETE: "affected", REPLACE with "disturbed".   |
| 1-40 | 3-8, #2, line 3: DELETE phrase "the access roads". REASON: Access roads are not regulated for other industries and should not be regulated for oil and gas operations.   |
| 1-41 | 3-9, para 2, line 2: CLARIFY what "local" means in this context.   |

| I-27 | DEC is concerned if the location of the well will result in environmental        |
|------|--|
|      | degradation. DEC does not become involved with aspects of third party            |
|      | contracts having no resource management implications.                            |
| I-28 | DEC has never suggested any regulation to confiscate separately owned            |
| 0    | mineral rights and grant them to the surface owner.                              |
| I-29 | Even after the GEIS is approved, site-specific permit conditions will be         |
| 1-27 | required in some cases to adequately assure environmental protection and         |
|      | allow DEC to issue a negative declaration.                                       |
| I-30 | The GEIS states that the Environmental Assessment Form will be required          |
| 1-30 |  |
|      | until the drilling permit is revised to include this information, but it is more |
|      | practical to keep it as an attachment than to have a multi-page drilling         |
|      | permit form. The EAF is being substantially revised and shortened. See           |
|      | Topical Response Number 3 on EAF and Site-Specific Permit Conditions.            |
| I-31 | See response to I-30.  |
| I-32 | See response to I-30.  |
| I-33 | The requirements regarding State Parklands and Agricultural Districts            |
|      | come directly from the SEQR regulations. Therefore, the Division of              |
|      | Mineral Resources cannot change them. The SEQR regulations protect               |
|      | the surface regardless of mineral rights ownership.                              |
| I-34 | Waterflood, tertiary recovery, underground gas storage and solution mining       |
|      | projects do have potential environmental impacts that are different from         |
|      | single well projects. See Chapters 12, 13, and 14. As stated earlier,            |
|      | existing federal requirements do not always adequately address all               |
|      | environmental concerns. See responses to I-22 and I-23.                          |
| I-35 | See response to I-30.  |
| I-36 | There is already a cross-reference between these two sections of the text.       |
| I-37 | After a final environmental impact statement has been completed, an              |
|      | agency must write a findings statement certifying that the SEQR                  |
|      | requirements have been met, and provide written support for the agency           |
|      | decision. Occasionally, an agency inadvertently fails to address a               |
|      | substantive issue in the findings statement, and when this occurs a              |
|      | supplemental findings statement must be prepared.                                |
| I-38 | See responses to I-22 and I-23.  |
| I-39 | Under some circumstances the term "affected" could include acreage               |
| 1-37 | outside the project area or the actual disturbed area.                           |
| I-40 | An access road can represent a significant portion of the acreage disturbed      |
| 1-40 |  |
|      | for a project and must be considered as a potential source of erosion and        |
|      | sedimentation affecting surface waterbodies. Improper placement or               |
|      | construction of access roads can have negative impacts in agricultural           |
|      | areas, wetlands, floodplains and significant habitats (See Chapter 8).           |
|      | Access roads may also have a longer-term impact where they are left in           |
|      | place after the drill site has been reclaimed. See Topical Response              |
|      | Number 4 on Access Roads as Part of Project.                                     |
| I-41 | In this context "local" refers to a county, town, city, or village which has     |
|      | adopted its own floodplain or wetland permit program as provided for in          |
|      | State laws.  |
|      |  |

South A Park

1-421 3-9 f, Table 3.2 COMMENT: The symbols are hard to read and it is difficult to determine the designation. More distinct symbols are needed. 1-43 3-10 and top of 3-11: QUESTION: A line is missing. What is it? 3-11, #3, COMMENT: In addition, there would be negative impacts, such as some unwarranted impediments to resource development and 1-44 the resulting decrease in employment and other economic benefits. CHAPTER IV: HISTORY OF OIL, GAS AND SOLUTION SALT PRODUCTION IN NEW YORK STATE. 1-45 4-1, 11, at end of paragraph, REFERENCE "Orton, 1899" not "Herrick". 4-1, #2, last sentence, ADD the word "test" so that the first part of the sentence reads, "The first recorded oil test well in New York State ... " 4-2, line 1, CHANGE "900" to "600". 4-2, line 2, REFERENCE "Herrick, 1949" not "Dodd, Mead". 1-48 4-2, 2nd para. last line, CHANGE "300" to "192" new wells in 1986 1-491 and add a statement to read "...in 1987 less than 200 new wells were drilled." 1-50 4-2, 3rd para, last line ADD phrase to read, "and regulations do not significantly increase the cost of production." 4-2, 4th para., first sentence, ADD phrase at end of sentence to read, "and federal and state regulations." 4-2, figure 4.2, CHANGE \*33.7 bcf\* to \*34.2 bcf\* in notation on 1-521 table. 4-3, 2nd sentence, ADD "producing" so that the line reads, \*Chautaugua County is the State's leading natural gas producing county..." 4-3, \$4, 2nd sentence, QUESTION: Does anyone store liquid petroleum gas in aquifers, or do you mean depleted aquifers? 4-5, D, line 3, CHANGE spelling of "Allegheny" County to the correct spelling "Allegany" 4-5a, Figure 4-3, REVERSE #2 and #3 and add #6 to show "Texas Brine, Wyoming". Note this addition on the map by inserting a circle in the upper right corner of Wyoming County. 1-57 4-6, 1st para., NOTE in this paragraph that the creek is now completely clean and has been for many years.

| I-43                 | The missing line is "on the road. Major changes in land use patterns, traffic and the need for"   |  |  |
|----------------------|---|--|--|
| I-44                 | The negative economic impacts of the proposed regulations on the oil and gas industry are discussed in Chapter 18. While we recognize the industry's current economic difficulties, we have a mandate to protect New York State's environment. The oil, gas and solution mining regulatory program and proposed revisions are warranted by the need for mitigation of potential adverse environmental impacts of activities regulated by the program. |  |  |
| I-45                 | The information is also in Herrick's Empire Oil.  |  |  |
| I-46                 | We agree that the addition of the word "test" would be more appropriate.  |  |  |
| I-47                 | Correction noted; "900 feet" should be "600 feet".  |  |  |
| 1-48                 | Correction noted; "Dodd, Mead" should be "Herrick".   |  |  |
| I-49                 | According to Division of Mineral Resources' records, 308 wells were spudded and 293 wells were completed in 1986. In 1987, 299 wells were spudded and 279 wells were completed. This information was published in 1988 in the Division's annual report.   |  |  |
| I-50                 | "Economics" as used in this context refers to all costs of oil and gas activity, including those necessary to comply with regulations.  |  |  |
| I-51                 | We agree that regulations have an influence on new drilling and production. Federal and State regulations are included as "other factors" in the sentence as it is currently written.   |  |  |
| 1-52                 | Correction noted.   |  |  |
| I-53                 | Correction noted.   |  |  |
| I-54                 | Natural gas is stored in undepleted aquifers in the State of Illinois. Liquid petroleum gas (LPG) is not.   |  |  |
| I-55<br>I-56<br>I-57 | Correction noted. Correction noted. This paragraph is discussing historical occurrences, and does not imply anything regarding the current state of the creek.  |  |  |

I-42

Comment noted.

4-7, first line, DELETE "or upward" from this line. REASON: There is always a confining rock bed, otherwise it wouldn't be a reservoir. Delete last three sentences of the paragraph beginning on page 4-6 through the top of 4-7. The example given is hearsay. i-59 j 4-7, 1st full paragraph, DELETE last two sentences. REASON: Environmental contamination was insignificant, even at that time. 4-7, 2nd para., third line, ADD phrase "after continued spills" to read, "and bacterial action will break down the oil so that, within a short period of time, no harm will be found." I-61I 4-10, 1st full paragraph under "e", line 5, CHANGE "40,000" to "over 50,000" and cite Don Drazen as the reference. DELETE phrase at the end of this sentence beginning with ... "when the state first began keeping records." Also, strike the last sentence in paragraph. REASON: This is an overstated representation of the problem. 1-621 4-11, 1st full paragraph, last sentence, ADD at the end of the sentence "...in conjunction with the Pederal EPA regulatory program." 4-11, 3rd para., line 3, DELETE "to" and add "should" so that the phrase will read, "...should allow for the greatest ultimate recovery of oil and gas." 4-12, 2nd full para., 1st sentence. DELETE this sentence. REASON: It is untrue. Casing and cementing regulations were updated in 1985 and Bass Island regulations were implemented in 1986. 1-65 p.4-12, 2nd full para., line 6, DELETE phrases "high pressure" and "(high for New York)" in this sentence. p. 4-12, 2nd full para., line 6, COMMENT: Regulations covering drilling in the Bass Island trend now exist. CHAPTER V. NEW YORK STATE GEOLOGY AND ITS RELATIONSHIP TO OIL, GAS AND SALT PRODUCTION COMMENT ON TITLE OF CHAPTER V: It would be more accurate to insert the phrase "DEC Interpretation" in the title of this section. 1-68 5-2, #2, 2nd last sentence, DELETE "nearly", and add "not". 5-3, B, 1st para., 2nd to last sentence, ADD phrase "temperature and", so that sentence reads, "Over geologic time, temperature and bacterial activity...\* 5-3, last para., line 6, DELETE "upward".

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| I-58 | Although a reservoir could not form without a confining rock bed, a confining bed can be breached by improperly completed wells. The word "breach" instead of the word "absence" in this sentence would be more appropriate. A reservoir can also exist without a confining caprock for quite a while, though it would be a short time geologically (i.e. natural seep areas). The example cited is documented on pages 314-315 of Herrick (1949), where the operator claimed responsibility and agreed to pay damages. |
|------|---|
| I-59 | This statement makes no judgment regarding significance.  |
| I-60 | Suggested addition is unnecessary. The paragraph already states that surface pollution is usually temporary.  |
| I-61 | Correction noted. "40,000" should be "over 50,000." References are VanTyne (1967) and IOCC (1955). Change "State" to the "Department of Environmental Conservation." The last sentence is not an overstatement. The lack of adequate information on many of these wells has been a serious hindrance to the Department when investigating pollution problems in areas drilled prior to 1966.  |
| I-62 | Correction noted.   |
| I-63 | The use of the word "to" maintains parallel treatment of the phrase "to help protect mineral rights of well owners."  |
| I-64 | The regulations have been updated since 1972 with respect to Part 551.2, Part 554.2, Part 556.6, and Part 559. The word "extensively" should be added in front of "updated" to make this sentence technically correct. The casing and cementing guidelines are not yet regulations.   |
| I-65 | Our records indicate that the Bass Island pressures are "relatively high" for<br>New York with initial pressures very close to hydrostatic.   |
| I-66 | Permit conditions were imposed on Bass Island wells before the regulations were promulgated.  |
| I-67 | DECs interpretation is implied since DEC is the author of the entire GEIS.  |
| I-68 | Rewording the phrase "is nearly continuous" to "is nearly complete with only minor breaks" would be more technically correct.   |
| I-69 | Rewording this phrase to "Over geologic time, temperature, pressure and bacterial activity "would be correct.   |
| I-70 | The suggested deletion of "upward" is more technically correct.   |

- 5-4, 1st para., line 4. CHANGE "structure" to "feature" REASON: It's not always a structure.
- 1-72 5-5, top of page, line 4, CHANGE "150" to "120".
- 5-5, \$1, 3rd para, 2nd last line, DELETE "like shales". REASON: Shales in New York have low porosity.
- I-74 5-7, 2nd full para., line 2. ADD sentence to read "Interstate and intrastate gas transportation has also helped maintain low prices for gas utilities and gas consumers." A sentence should also be ADDED in this paragraph that addresses the disincentives to drill caused by increased state and federal regulatory programs which can have the effect of increasing costs to the point where the economic benefit of oil and gas development and production is outweighed by the cost of compliance with these regulations.
- 1-75 5-8, 1st full para., 2nd last line. CHANGE "33" to "nearly 60".
- 5-9, lst full para., ADD sentences at the end of the paragraph to read, "There is an ongoing discussion concerning whether the State's production allowables have increased ultimate recovery. Industry believes regulations have actually caused waste and decreased ultimate recovery."
- 1-77 Figures 5.2 and 5.3. COMMENT: There is an inconsistency in the designation of bedrock. The maps should not overlap.
- 1-78 5-15 top line DELETE this line. It appears on the bottom of page 5-14.
- 1-79 5-16 line 4, REFERENCE (Van Tyne, 1981).
- 1-80 5-16, 1st full para., REFERENCE (Van Tyne, 1981).
- 1-81 5-17, 3rd full para., REFERENCE (Van Tyne, 1981).
- 1-82 5-18, top of page, 3rd line, REPERENCE (Van Tyne and Copley, 1983).
- 1-83 5-18, 2nd full para., line 1, CHANGE "1,000" to "2500".
- i-84 5-21, 2nd full para., line 6, CHANGE this sentence to read,
  "Through repeated use of this driller's misnomer, the Akron has
  become known as New York's "Bass Island Formation," and is
  considered to be the source bed for the oil and gas produced
  throughout the Bass Island trend."
- I-85 5-23, 4th full para., line 4, CHANGE to read "...plain, is represented by sandstone in the area of the deltaic deposition and thins ..." Also, ADD the word "predominately" between "continuous" and "limestone" in the last sentence of this paragraph.

- I-71 The suggested rewording is more technically correct.
- I-72 Gas wells were producing between 1821 and 1865.
- I-73 This section is a general discussion on porosity and permeability and is not specific to New York. Adding the modifier "immature" in front of "shales" would be more technically correct.
- I-74 The complexities of intrastate and interstate gas transportation are beyond the scope of the GEIS. For a fuller discussion of economic impacts resulting from regulation which affect the oil and gas industry, refer to Chapter 18.
- I-75 Change "33 percent" to "nearly 60 percent". During the preparation of this document, additional declines occurred.
- I-76 The suggested addition goes beyond the scope of this section of the GEIS.
- I-77 Correction noted. These maps should not overlap.
- I-78 Correction noted.
- I-79 Add the reference (VanTyne, 1981).
- I-80 Add the reference (VanTyne, 1981).
- I-81 Add the reference (VanTyne, 1981).
- I-82 Add the reference (VanTyne and Copley, 1983).
- I-83 Rewording of this phrase to "The Salina Group forms a sequence up to 2,500 feet thick of red..." is more correct.
- I-84 Explanation for including the Rondout is given in preceding text. The complex geology along the Bass Island trend has various interpretations.
- I-85 This paragraph is a general discussion of Tully limestone deposition. A detailed discussion of time equivalent lithologic variations is beyond the scope of the GEIS.

5-25, a. line 6, DELETE the sentence beginning on this line. REASON: It is not true. 5-26, 1st full para., 3rd line from the bottom. DELETE phrase, "...the faults appear to cut across the folds." and change to read ... "the faults parallel the folds." REASON: They do not cut across the folds, they parallel the folds. 1-881 5-26, b. 1st para., last line, ADD phrase so the line reads.... but no evidence for this gap exists in the far eastern part of the state." 1-89 5-27, 1st full para., 2nd last line, CHANGE "1974" to "1977". 1-901 5-28, 1st full paragraph, line 3, CHANGE: "Genesee" should be "Geneseo". Also, ABD "could" to second last line to read ... huge area underlain by gassy shales could make them a significant contributor to ... \* 1-911 5-28, 2nd full paragraph, DELETE last sentence. REASON: The statement is incorrect, as it has not been demonstrated. 1-92 5-29, e., 1st paragraph, 2nd last line, CHANGE "Most" to "All" so the line reads, "All of the Upper Devonian oil fields occur in Allegany..." 5-33, 1st full paragraph, line 6, CHANGE "Triassic" to "late Paleozoic". CHAPTER VI. ENVIRONMENTAL RESOURCES 1-941 6-1, 1st para., After the last sentence, ADD the phrase, "... however, data indicate that many of the sites return to their original state even if left alone." REASON: Environmental effects attributed to the industry from the early 1900's can no longer be detected. 6-1, 2nd para., DELETE 3rd sentence beginning on line 6, REASON: This is not necessarily true, and if conflicts do arise, they are currently being adequately handled by mitigation measures set forth in permit conditions. 6-3, C, 1st para., line 8, DELETE phrase ...as well as the watersheds that supply them. REASON: "Water supply" is the term

that will be used in developing future regulations and the

6-3, C, 1st para., line 8, DEFINE term "significant amounts" in

6-4, 1st full para., last line, CHANGE "can" to "may". REASON:

7

implication of using the term "watershed" is not known.

There are valleys without any sand or gravel deposits.

this context.

|      | characterized by high pressure and good reservoir capacity when compared with most other New York producing formations."  |  |  |
|------|---|--|--|
| I-87 | The line ",but where the axial direction of the anticlines changes from northeast to east the faults appear to cut across the folds." should be deleted.  |  |  |
| I-88 | Correction noted. Insert "far" before the word "eastern".   |  |  |
| I-89 | There were two possible reef discoveries in 1986 and 1987. Delete "Although no additional reef fields have been discovered since 1974," and start the sentence with "Future discoveries"  |  |  |
| I-90 | Change "Genesee" to "Geneseo." The Geneseo Formation is equivalent to the lower "Genesee" Group. The use context of "resource base" in this sentence is estimated potential reserves.   |  |  |
| I-91 | Orton (1899) lists numerous examples of wells near Lake Erie that encountered gas-bearing black shales at 100-300 feet. The shale encountered by these wells is assumed to be the Dunkirk Shale, which is the shallowest of the Devonian black shales that has been identified as a potential gas producer. |  |  |
| I-92 | The suggested change is correct.  |  |  |
| 1-93 | Changing the sentence to read " Appalachian Orogeny occurring in the late Paleozoic through Mid-Triassic" is more correct.  |  |  |
| I-94 | This general statement is not specific to the oil and gas industry, and it is correct as written.   |  |  |
| I-95 | This sentence does not address the availability or adequacy of mitigation factors.  |  |  |
| I-96 | Watersheds must be considered in any surface water supply protection plan. The Department of Health has watershed regulations (Section 1100 of Article 11 of the Public Health Law).  |  |  |
| I-97 | "Significant amounts" is part of the definition of aquifer, and the definition of "significant" would vary among different areas.   |  |  |
| I-98 | The suggested change to this text would not alter the intent of this sentence.  |  |  |
|      |   |  |  |

The following rewording is more correct: "The Oriskany production is

I-86

|   | 1-99  | 6-4, 2nd full para., last sentence. CHANGE: This sentence should be changed as it is mid-1988 and the maps are not yet available.   |
|---|-------|---|
|   | -100  | 6-5, 2nd full para., COMMENT: The possibility for contradictory regulations exists unless these programs are closely coordinated.   |
|   | I-101 | 6-6, D. Public Lands, COMMENT ON THIS ENTIRE SECTION: If development of privately-owned oil and gas under public lands is in anyway impaired by DEC regulation, then DEC should purchase the mineral rights at fair market value.   |
| ٠ | I-102 | 6-8 F. Wetlands, COMMENT ON THIS ENTIRE SECTION: If development of privately-owned oil and gas in wetlands areas is in anyway impaired by DEC regulation, then DEC should purchase mineral rights at fair market value. In addition, wetlands maps for the same areas vary from DEC region to DEC region. There is a need for updated, standardized wetlands maps available for sale to the public. |
|   | I-103 | 6-9, G., 1st para., line 5. DELETE sentence starting with "Severe loss of lifein these areas." REASON: The statement does not belong in a GEIS concerning oil and gas. It is our interpertation that "development" in this context is meant to indicate housing or industrial development, not oil and gas.   |
|   | i-104 | Figure 6.4 CHANGE: Figure needs to be redrawn. Can't discern from the key what the map is supposed to depict.   |
|   | I-105 | 6-11, I, 2nd para., 2nd sentence, DELETE this sentence. REASON:<br>Private dollars have also been invested in oil and gas leases and<br>in the production of oil and gas in New York State.   |
|   | I-106 | 6-12, lst full para., DELETE whole paragraph. REASON: It doesn't deal with environmental matters relating to oil and gas.   |
|   | l-107 | 6-14, K. Significant Habitat. COMMENT: The term is broad enough to include all habitats and the definition is so broad as to be meaningless. DEFINE what has to be dealt with so that it can be understood by the industry. Also, DEFINE what is meant by "wildlife" in this context.   |
|   | 1-108 | 6-15, lst full para., COMMENT: If the State or private groups wish to acquire fish and wildlife areas, then the owners of mineral rights under these lands should be compensated at full market value.  |
|   | I-109 | 6-16, L. COMMENT: Local minerals managers should have access to precise information locating historic or culturally significant areas (in distances less than the current one mile) to save operators the expense of archeological surveys.   |
|   |       |   |

 $6-16\,$  M. QUESTION: Are the DEC's facts on acid rain compatible with those of the federal government?

| I-99  | Several of these maps are currently available.  |
|-------|---|
| I-100 | Comment noted.  |
| I-101 | The taking issue has been addressed by New York State courts. See Topical Response Number 1 on Public Taking Without Compensation.  |
| I-102 | See response to I-101. The Division of Fish and Wildlife staff, who regulate wetlands, are aware of this problem and are working toward standardization of the Wetland Classification Maps.   |
| I-103 | This statement obviously refers to floodplain development in general, and is not specific to the oil and gas industry.  |
| I-104 | We apologize for the reproduction quality of this map.  |
| I-105 | This sentence is one of fact regarding agricultural lands, the subject of this section. We recognize also that the same statement could apply to oil and gas operations in New York State.  |
| I-106 | This paragraph is relevant in addressing the possible impacts on agricultural lands by oil and gas operations.  |
| I-107 | This is the standard definition used by the Department. See reference section, page 6 entitled "Significant Wildlife Habitats in New York", Division of Fish and Wildlife. According to Webster's Ninth New Collegiate Dictionary "wildlife" is defined as living things that are neither human nor domesticated. |
| I-108 | See Topical Response Number 1 on Public Taking Without Compensation.  |
| I-109 | The Office of Parks, Recreation and Historic Preservation (OPRHP) feels it is necessary to restrict access to these maps.   |
| I-110 | No. New York State and the federal government disagree on the severity of the problem.  |

- 6-17 N. COMMENT: Whose subjectivity will be accepted and whose subjectivity will prevail concerning visual resources? We believe all references to visual impacts in the GETS should be deleted as they allow for enormous discretionary authority for the reason stated in this section that "their value cannot be precisely defined." In addition, the greatest visual impact will occur during the drilling phase which is temporary. After completion of drilling operations, 90% of the equipment involved is buried underground.
- I-112 6-18, 1st full sentence. DELETE this sentence. REASON: Aesthetic compatibility standards are not relevant to oil and gas operations. Most of the drilling locations in New York State are in remote, sparsely populated areas and actually provide a visual curiosity that draws interested onlookers. The whole idea of regulating visual impact is so far-reaching and arbitrary ab to be frightening,i.e. in California, some rigs must be camouflaged by building of facades.

# CHAPTER VII. NEW YORK STATE OIL, GAS AND SOLUTION MINING REGULATORY PROGRAM.

- I-113 7-1, 2nd para., COMMENT: It should be noted that operators or companies drilling wells may disagree with the statements made in this paragraph and may believe that the State's regulatory programs do not always allow for the claims made here and, in fact, may actually promote waste.
- I-114 7-2, 1st full para., line 10, ADD phrase after the word drainage, to read, but may make reserves unrecoverable.
- I-115 7-2, a. line 3, DELETE phrase beginning with "...and an assessment of probable adverse environmental impacts..." REASON: Permit conditions should be based on the facts of the situation involved in that particular setting, not improbable "what if" situations.
- I-116 7-5, 2, #4) DELETE #4. REASON: This should no longer be necessary once the GEIS is in place. Also, this will be addressed in the new permit application form.
- I-117 7-5, 4th full para., line 2 and 3: DEFINE what "information" will be required on nearby wells. Also, DEFINE what is meant by "nearby."
- I-118 7-6, lst sentence at the top of the page. COMMENT: The procedure to transfer the fee from one permit to another should be formalized and listed in the GEIS under "permit application."
- 1-119 7-6, 1st para., line 1, COMMENT ON THE EAF: Constant reference is made to the use of an EAF throughout the GEIS. The GEIS should obviate the need for an EAF except in certain specified instances. Purther, line 1 should read "...The environmental assessment information incorporated in each permit application"

| I-111 | See Topical Response Number 2 on Visual Resources and Assessment Requirement.  |
|-------|--|
| I-112 | See Topical Response Number 2 on Visual Resources and Assessment Requirement.  |
| I-113 | This paragraph is merely a restatement of 6NYCRR Part 550.1.   |
| I-114 | Variances may be granted to any operator who can show that reserves may be unrecoverable under current spacing requirements. |
| I-115 | "Probable" in this statement means adverse environmental impacts that are likely in our best professional judgment to occur. |
| I-116 | This section describes the current permit application requirements.  |
| I-117 | Again, this section describes the existing requirements of 6NYCRR Part 552.2.  |
| I-118 | Transfer procedures are already formalized. Please see 6NYCRR Part 552.4.  |

|               | and this paragraph and the one immediately following should be changed to discuss the fact that this information will be requested on the permit application form.  | I-119 | This section describes current procedures. See Topical Response Number 3 on EAF and Site-Specific Permit Conditions.  |
|---------------|---|-------|---|
| I-120         | 7-6, 2nd full para., GENERAL COMMENT ON ACCESS ROADS: DELETE the reference to "access roads" in the 2nd paragraph. No other industry is subject to regulation concerning access roads   | I-120 | See Topical Response Number 4 on Access Roads as Part of Project.   |
| i             | and neither should the oil and gas industry. This is a matter dealt with by agreement between the operator and the landowner.   | I-121 | During preparation of the GEIS, the SEQR regulations were amended and the 15-day time period for the Department to review the pertinent   |
| I-121         | 7-7, 3, last sentence on the page, QUESTION: What happens if no answer is received from the DEC within 15 days?   | ٠     | environmental data and make a determination has been extended to 20 days. This review period is directory, not mandatory.   |
| I-122         | 7-9, line 10 midway down the page, DELETE this sentence. REASON: The GEIS should be all inclusive when finalized. $\eta$  | I-122 | See Topical Response Number 5 on Reasons for Including Proposed Regulations in the GEIS.  |
| I-123         | 7-9, last para., GENERAL COMMENT: WE BELIEVE ALL PROPOSED CHANGES   | 4     | Regulations in the OLio.  |
| l             | TO REGULATIONS SHOULD BE REMOVED PROM THE BODY OF THE GEIS AND INCLUDED IN A SEPARATE APPENDIX. THE PROPOSED REGULATIONS ARE JUST THAT - PROPOSED. THEY HAVE NOT BEEN PINALIZED AND ADOPTED.  | I-123 | The proposed regulations are clearly separated in <b>bold type</b> and summarized again in bold type in Chapters 16 and 17. See Topical Response Number 5 on Reasons for Including Proposed Regulations in the          |
|               | CHAPTER VIII. SITING OF OIL AND GAS WELLS   |       | GEIS.   |
| 1-124         | 8-1, 2nd & 3rd para., DELETE references to access roads for reasons cited above.  | I-124 | See Topical Response Number 4 on Access Roads as Part of Project.   |
| I-125         | 8-1, B. 2nd para., 2nd last line, ADD phrase so that sentence<br>reads, "Well spacing regulations do not apply to solution mining<br>wells or gas storage wells."   | I-125 | Correction made. Well spacing does not apply to gas storage or solution mining wells.   |
| ļ-12 <b>6</b> | Figure 8-1, DELETE access road from figure.   | I-126 | See Topical Response Number 4 on Access Roads as Part of Project.   |
| I-127         | 8-2, 1, 1st para., line 6, CHANGE to read, "Spacing of any future waterfloods proposed for new oil field areas would be at the discretion of the operator. There are no spacing requirements on any secondary or tertiary operations." REASON: The operator possesses the greatest expertise and interest in maximum resource | I-127 | The operator would, of course, propose spacing in his application for a new waterflood. This spacing proposal would still have to be reviewed by Department staff.  |
| 1             | recovery. These projects are very expensive to initiate and administer.   | I-128 | We agree that the suggested wording is more correct.  |
| I-128         | 8-2, 1, 1st para., ADD phrase at the end of the last sentence to read, "except along the Pennsylvania-New York state line where a 330' setback is in effect."   | I-129 | Forty-acre statewide spacing was adopted based on the readily available information. When the workload allows, DEC staff will determine if the spacing rules need revision. In the meantime, any operator who can show  |
| I-129         | 8-2, 1, 2nd para., line 1, DEFINE term "temporarily" as used in this context.   |       | that greater ultimate recovery would be achieved by a change in well spacing can apply for a spacing variance on a field and formation basis.   |
| I-130         | 8-3, C, line 7, DELETE references to access roads for reasons cited earlier in these comments.  |       | We receive very few requests for spacing variances.   |
| I-131         | 0 2 C line 1) CUNNET #2 640 feet# to #1 000 to 2 000# TENCON.   | I-130 | See Topical Response Number 4 on Access Roads as Part of Project.   |
|               | 8-3, C, line 11, CHANGE "2,640 feet" to "1,000 to 2,000" REASON: It does not coincide with information given in Table 3.1. Also, the word "well" should be ADDED so the statement reads, "within 1,000 to 2,000 feet of a municipal water supply well."   | I-131 | These are items listed on the pre-drilling site inspection form which is filled out by the field inspection staff. It is a checklist for both the proposed well and access road, and correspondence to Table 3.1 is not |
|               | 10  |       | intended. See pages 8-17 and 8-18 for an explanation of the 1,000, 2,000 and 2,640 figures.   |

- 8-4, D, 1, ADD variance provisions as addressed in Section C,
  "Siting Regulations and Policies."
- 8-4, 1, 1st para., line 12, ADD phrase at end of the sentence beginning with "Geology largely dictates..." to read "...in conjunction with lease restrictions and state regulations,"
- I-134 8-4, l, last sentence, bottom of the page. COMMENT: Landowners purchased the property knowing leases were in effect.
- 1-135 8-5, 1st full para., DELETE this paragraph. REASON: It is unnecessary and self-serving.
- I-136 8-5, 2nd full para., last sentence. COMMENT: If this regulation is adopted, it should allow a variance from 660 setback from lease boundary line or house.
- 1-137 8-5, 3rd full para., line 6, DELETE parenthetical comment "(as occurred in the spring of 84)." REASON: It is enough to simply state "accidental explosion of an oil tank"
- I-138 8-6, 1st full para., DISAGREE with this recommendation. REASON:
  The drawings would serve no real purpose. Field conditions at
  the actual time of drilling are likely to change due to wind
  conditions, etc., and the drawings would be meaningless.
- 1-139 8-6, 2, DELETE references to visual impacts for reasons cited earlier in these comments.
- I-140 8-6, 2, a. AGREE with the statement concerning the temporary nature of noise, visual and air quality impacts.
- 1-141 8-8, 1st full para., AGREE that the degree of aesthetic compatibility or incompatibility is a subjective matter influenced greatly by perception. In reality, will anyone ever be able to do anything without affecting visual impact on someone?
- I-142 8-9, \$3, QUESTION: What is the basis of the statement concerning the nighttime sound level in "quiet, rural New York"? We doubt the nighttime sound level is 30 dBa. What data were used to determine this?
- I-143 8-10, lst para., and formula, DELETE. REASON: It is difficult to implement regulations based on calculations and equations which are effectively meaningless due to their inexact nature.
- 8-10, 2nd para., line 4, DELETE requirement for muffler, etc.

  REASON: This is unreasonable due to transient nature of shortterm drilling operations.

- I-132 The variance provisions addressed in Section C apply by implication to Section D, since it is extremely unlikely that associated drilling equipment would be located a significant distance from the well.
- I-133 Sentences in the text above and below address lease restrictions and State regulations.
- I-134 See Topical Response Number 6 on Surface/Mineral Owner Lease Conflicts.
- I-135 See Topical Response Number 6 on Surface/Mineral Owner Lease Conflicts.
- I-136 There is no 660' setback requirement from houses. Variances from the 660' lease boundary setback may be granted.
- I-137 Commentators on earlier GEIS drafts requested specific examples of pollution incidents.
- I-138 The purpose of the sketch of equipment placement is to insure that these items are placed with consideration to public safety and environmental factors. We realize that changes might be necessary because of field conditions. At the time the permit application is reviewed, the field inspector will verify that equipment setbacks are adequate. An alternate proposal to accomplish this same goal would be to require setbacks specific to the entire drilling site instead of the wellbore.
- I-139 See Topical Response Number 2 on Visual Resources and Assessment Requirement.
- I-140 Most noise, visual and air quality impacts are temporary. Section 8.D.2.b. discusses the longer-term noise and visual impacts.
- I-141 Comment noted.
- I-142 Comment noted. This information was obtained from a letter written by Robert Vessels, Director, PSC Office of Energy Conservation and Environmental Planning to Richard Brescia, Chairman, New York State Oil, Gas and Solution Mining Advisory Board. Please note personal communication number change from #58 to #69.
- I-143 This section is included in the GEIS for information only. Discussion of noise impacts is required by SEQR regulation. The Department is not proposing at this time to regulate noise.
- I-144 The recommendation of a requirement for a muffler is not made. As stated in the text, pneumatic mufflers and sound barriers might be appropriate only under special circumstances.