

MEMORANDUM FOR DISTRIBUTION #2
NUMBER (FYI: 11-04)

Subject: Policy Development Affecting Oil and Gas Outgrants

1. References:

- a. Southwestern Division Policy, SWDP 1110-2-1156, 17 March 2011.
- b. Sample Letter, CESWF-OD, addressed to Congressional Representatives.
- c. Communication plan and draft news release, SAB.

2. Enclosed for your situational awareness is a copy of the SWD Policy, SWDP 1110-2-1156, Mineral Exploration and Production Activities in Close Proximity to Flood Risk Management Structures, dated 17 March 2011, sample letter sent to congressional representatives, communication plan, and draft news release to be released this week.

3. The congressional letters were sent on 15 June 2011 (reference 1.b.). Notification letters to all the oil and gas companies with current SWF outgrants will also be sent out this week.

4. The CESWF-OD points of contact are Mr. Chris Byrd, (817) 886-1569, or Mr. Greg Webb, (817) 886-1576, and the CESWF-EC-DG technical point of contact is Ms. Anita Branch, (817) 886-1703.

Encls


CHARLES L. BURGER
Chief, Operations Division

CF (w/encls):
CESWF-RE
CESWF-EC
CESWF-OC

DEPARTMENT OF THE ARMY
Southwestern Division, Corps of Engineers
1100 Commerce Street
Dallas, Texas 75242-1317

Pamphlet
No. 1110-2-1156

17 March 2011

Engineering and Design
MINERAL EXPLORATION AND PRODUCTION ACTIVITIES
IN CLOSE PROXIMITY TO FLOOD RISK MANAGEMENT STRUCTURES

1. **PURPOSE.** This pamphlet is designed to assist districts of the Southwestern Division in coordinating risk assessment of and formulating responses to mineral exploration and production activities located in close proximity to dams and other major water retention structures, including all flood risk management projects under authority of the US Army Corps of Engineers.

2. **REFERENCES.**

- a. AR 405-30. Mineral Exploration and Extraction
- b. ER 1110-2-1156. Dam Safety – Organization, Responsibilities, and Activities
- c. ER 405-1-12. Real Estate Handbook, Chapter 8, Real Property Management
- d. Memorandum of Understanding for the Onshore Oil and Gas and Geothermal Program (43 CFR Parts 3000, 3100, 3100). Department of Defense – Department of the Interior
- e. Texas Resource Management Plan – Record of Decision and Plan, U.S. Department of the Interior, Bureau of Land Management (5/31/1996)
- f. SWL Corps of Engineers Stipulations for Development of Federally-Owned Minerals (Revised June 1994)

3. **APPLICABILITY.** This pamphlet applies to all organizational elements of the Headquarters, Southwestern Division (SWDO) and districts.

4. **OBJECTIVE.** The objective is to provide a consistent method for Districts to assess risks and coordinate responses to mineral exploration and production activities in close proximity to dams and other major water retention structures in order to ensure the integrity of our flood risk management projects and to protect life, property and the environment. Districts will be held

accountable for following these procedures, and will be periodically evaluated against them during Staff Assistance Visits.

5. Background. USACE Districts in the Southwestern Division have recently received a number of inquiries and requests in connection with development of oil and gas production facilities near our dams and levees. They have also received a number of inquiries and requests in connection with development of oil and gas production and transportation of oil and gas through pipelines in close proximity to Corps of Engineers dams. Major natural gas shale formations currently being developed in the Southwestern Division include the Barnett Shale in north Texas, the Caney Shale in Oklahoma, the Fayetteville Shale in Arkansas, and the Haynesville Shale in northwest Louisiana and Texas. Concerns have been raised that these activities could result in damage to dams and other important structures at flood risk reduction projects. The Fort Worth District is in the process of preparing a formal engineering position explaining the risks and recommending a 3,000 foot lateral exclusion zone.

a. Drilling and Hydrofracturing. Commercial production of oil and gas from shale formations was not generally viable until recent advances in the use of directional drilling and hydraulic fracturing. Hydraulic fracturing involves the introduction of fluids under high pressure into the formations, creating fractures into which sand is introduced to keep the fractures open and allow the hydrocarbons to escape into the wellbore for production as oil and/or natural gas. Much is unknown about the impact of hydraulic fracturing and removal of oil and natural gas from formations in close proximity to USACE dams and other key structures. Although hydrofracturing generally occurs in formations that are found more than a mile below the ground surface, there is concern that the disruption to the geologic structure of natural gas shale formations could result in subsidence of the underground structures supporting dams, resulting in damage to the dams and associated structures.

b. Lands Where USACE Has Real Estate Interests. Until Fort Worth District completes its formal engineering assessment, the 3,000 foot lateral exclusion zone adopted by the Bureau of Land Management (BLM) for the purpose of protecting critical facilities from damage by oil and gas operations, and documented in their Record of Decision (ROD) on the Texas Resource Management Plan dated 31 May 1996, will apply to all USACE projects within CESWD. Within this exclusion zone, no surface occupancy and no drilling (including horizontal drilling) are allowed within 3,000-feet of critical facilities such as dams, embankments, and other areas critical for project operation when USACE owns the necessary estates in real property to control said development without approval from the District Commander.

c. Lands Where USACE Lacks Real Estate Interests. When existing USACE dams and levees were constructed, only the minimum interests in real estate were acquired by USACE to meet project requirements. As a result, in areas near the dam and other major structures, real estate interests may not have been acquired by the government if they were not required for project purposes. For example, private land downstream of the dam is frequently in close proximity to the dam structures, but because USACE has no real property interest in these lands, USACE has no direct control over development of oil and gas production underlying these lands. There is currently no statute or regulation which clearly provides USACE with authority to prevent exploration and drilling activities in those locations in close proximity to major

structures where the United States has no real property interest. Nevertheless, 33 USC 408 provides that it is unlawful for any person to impair the usefulness of any flood control work built by the United States.

d. Mineral Rights. Ownership of the mineral rights underlying USACE flood control projects varies by tract. The minerals may be owned outright by the federal government, may be third party owned, or some combination thereof. There may be subordination agreements or surface restrictions in place. It is also possible that BLM has leased any federally owned mineral interests. It is necessary to review and consider the specific ownership documentation of each tract in order to determine the rights and controls that USACE has on each tract, if any. If there is a BLM lease in place, USACE provides stipulations. These stipulations apply only to the federally owned mineral interests leased by BLM.

e. Mineral Leasing and Stipulations. Where the federal government owns the minerals, the Bureau of Land Management outleases the minerals with stipulations provided by USACE.

The stipulations currently used by the CESWF include the 3,000 foot lateral exclusion zone adopted by the Bureau of Land Management (BLM) for the purpose of protecting critical facilities from damage by oil and gas operations. CESWF's exclusion zone prohibits surface occupancy and drilling activities within 3,000-feet of all critical structures including, but not limited to embankments, berms, abutments, outlet works, and intake structures.

CESWL currently prohibits oil and gas exploration and production activities within 2,000-feet of any major structure, including the dam, spillway or embankments. This prohibition only applies to those lands underlying USACE flood control projects wherein the United States owns the minerals and has leased the minerals to third parties subject to this condition.

f. Legal Considerations

There is currently no statute, regulation or other control that clearly prohibits exploration and drilling activities in those locations in close proximity to major structures where the United States does not own the surface estate, the mineral estate or both. However, 33 USC 408 provides that it is unlawful for any person to impair the usefulness of any flood control work built by the United States.

The surface estate and the mineral estates are two different property interests in the same property that can exist simultaneously. In general, the mineral estate is the dominant estate over the subservient surface estate. The mineral estate owner, therefore, has an implied easement to use the surface in the exploration and production of the mineral estate. Because oil and gas law is rooted in real estate law, the laws of the state where the drilling is located must be considered in assessing the government's options. In Texas, for example, except for instances of negligence causing permanent surface damage, the dominance of the mineral estate is broadly construed. Under the Accommodation Doctrine, if the surface owner can show that the proposed use of the surface by the mineral owner will substantially impair existing surface uses and the mineral

owner has reasonable alternatives, the mineral owner must accommodate the surface owner's use.

The mineral estate owner, or their lessee, generally has the right to use the surface estate for the exploration and production of oil and gas without securing permission from the surface owner or restoring the surface or paying for damages to the surface. However, if the damage to the surface is found to be negligent, unreasonable or excessive, the owner of the surface may be entitled to restoration, money damages and/or injunctive relief. This is the duty of subjacent support. If damages are considered permanent, the surface owner is entitled to payment for the decrease in market value of his land. If damages are temporary, the surface owner is entitled to recovery for loss of use and enjoyment and the cost of repair.

Property owners owe neighboring property owners a duty of adjacent support. In areas where subsidence is caused by drilling and production on adjacent lands, the mineral estate owner and/or his lessee could be liable for damages and injunctive relief for damages to the surface. Because of the lack of privity of estate, the surface owner need not demonstrate that the damages to the surface be unreasonable, excessive or the result of negligence.

The problem with currently established remedies for damages to the surface caused by exploration and development of oil and gas is that they require that the damage take place before a remedy can be awarded. Because of the potential for cataclysmic damages if subsidence of the surface due to hydraulic fracturing and production of oil and/or natural gas causes a massive failure of a USACE dam, as well as the cost of repairs needed to such a massive structure if damages are less severe, Districts in SWD must consider solutions that would anticipate and prevent such damages from taking place.

6. Policy

Effective immediately, a 3,000 foot lateral exclusion zone shall apply for all projects within CESWD. Within this exclusion zone, no surface occupancy and no drilling (including horizontal drilling) will be allowed within 3,000-feet of critical facilities such as dams, embankments, and other areas critical for project operation when USACE owns the necessary estates in real property to control said development without prior approval by the District Commander.

Effective control of mineral extraction activities, particularly when USACE does not own the necessary estates in real property to control development within close proximity of dams and other structures, requires close coordination among district offices, especially Operations, Real Estate, Engineering-Construction and Counsel. Operations personnel are often the first USACE employees to become aware of new or proposed mineral extraction activities in close proximity to USACE projects. Mineral extraction activities can include exploration operations, mining operations, drilling operations, production operations, reworking operations (including hydraulic fracturing), and high pressure pipeline operations. Real Estate personnel must investigate the location of the activities and determine the federal real property interests in the location. Engineering-Construction personnel must evaluate any new or proposed activities in order to make a determination whether said activity is compatible with the structural integrity of the dam

and other major structures. Counsel must review applicable laws and ordinances that may affect the site of the activities and advise as to what legal actions can be taken to prevent harm to USACE structures and put appropriate authorities on notice of the potential danger.

Each District within SWD shall establish a Standing Project Delivery Team (PDT) to consider the potential impact of oil, gas, and mineral exploration within 3,000 feet of any USACE dam or flood control structure. The PDT must include at least a representatives designated by the Dam Safety Officer, Chiefs of Operations and Real Estate, and District Counsel.

a. Minerals Owned by the Federal Government. The Mineral Leasing Act of 1920, as amended, and the Mineral Leasing Act for Acquired Lands of 1947, as amended, give the Bureau of Land Management (BLM) responsibility for oil and gas leasing on about 564 million acres of BLM, national forest, and other Federal lands, as well as State and private surface lands where mineral rights have been retained by the Federal Government. Minerals underlying USACE Projects are generally made available for development when a private party nominates the leasehold for production through an expression of interest. BLM makes such leases available under a competitive process. Once a property has been identified for leasing by BLM, BLM contacts the district for any restrictions that USACE wants included in the lease. While Real Estate is the proponent for providing said restrictions, Real Estate will fully coordinate its efforts with the Standing PDT to make sure that the restrictions are in compliance with dam safety and other applicable standards. Real Estate will also comply with any other guidance, such as the Texas Resource Development Plan referenced herein or any other agreement between USACE and other agencies.

b. Surface Owned by the Federal Government; Minerals Owned by Third Parties. When the minerals are owned by third parties, the mineral owner's rights and responsibilities are governed by the deeds and other documents through which the government acquired title to the property. When any SWD personnel becomes aware of new or proposed mineral exploration and development activity within project boundaries, they must immediately notify the Chief, Real Estate Division, for the district wherein the project is located. The realty specialist assigned to the matter will then coordinate with Standing PDT to determine the government's existing rights with regard to the mineral estate and what controls can and should be placed on said activities under 33 USC 408 or other existing legal authorities.

c. Surface and Minerals Owned by Third Parties. When both the surface estate and mineral estate are owned by non-federal interests, USACE has no clear statutory authority to prevent exploration and production activities of the mineral estate. When any SWD personnel becomes aware of new or proposed mineral exploration and development activity (including, but not limited to the locating of transmission lines and compressor stations) located on private property, but outside of project boundaries, they must immediately notify the Dam or Levee Safety Officer for the district wherein the project is located. The Dam or Levee Safety Officer assigned will then coordinate with Standing PDT to determine the government's rights with regard to the mineral estates and what controls can and should be placed on said activities under 33 USC 408 or other existing legal authorities.

d. Potential District Responses. The district response may include advising the project owners that a permit under 33 USC 408 is required; additional monitoring of the dam; and education of project personnel, mineral owners, mineral lessees, mineral developers, any authorities having jurisdiction over oil and gas drilling operations, local government authorities, and the public on potential impacts to the dam or levee. It also may include recommendations to buy property and/or mineral rights to prevent the drilling or hydraulic fracturing including federal condemnation procedures; or legal action to prevent the drilling based on failure to obtain a permit under Section 408; danger to the public; or other authority which may be appropriate under the circumstances. The Southwestern Division Dam Safety Office and Office of Counsel will be consulted before any legal action is initiated.

e. Coordination with State and Local Agencies. Each District shall contact appropriate state and local agencies having authority to permit oil, gas, and mineral exploration activities and any pipelines creating any risk of significant explosions and request their cooperation in not permitting activities within 3,000 feet of USACE dams or flood risk reduction projects without prior coordination with the District Dam Safety Officer. This contact shall be in writing.

f. Actions if Activities Cannot Be Prevented. If mineral exploration within 3,000 feet of a USACE dam or flood risk reduction project cannot be prevented, the District will send letters to the owner and operator of the exploration facilities placing them on notice of the public safety risk created by their activities with copies to appropriate state and local authorities. The District Dam Safety Officer shall consider and make a written record of any measures which may be taken by USACE to decrease risk, such as increased monitoring of the structure.

7. CHANGES. District Commanders, SWDO Directors, and Office Chiefs may submit changes to the Division Dam or Levee Safety Officer. The SWF Commander will make any appropriate recommendations for changes after completion of studies which are being initiated to address the situation at Joe Pool Lake have been completed. All changes will be submitted to the Division Commander for final approval.


THOMAS W. KULA
Colonel, EN
Commander



REPLY TO
ATTENTION

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT, CORPS OF ENGINEERS
P.O. BOX 17300
FORT WORTH, TEXAS 76102-0300

JUN 13 2011

Operations Division

Honorable John Cornyn
United States Senate
221 West Sixth Street, Suite 1530
Austin, Texas 78701

Dear Senator Cornyn:

The purpose of this letter is to inform you of a recent policy development within the U.S. Army Corps of Engineers (Corps), Southwestern Division (CESWD), that will affect the processing of some easements, leases, licenses, and other real estate grants of interest (outgrants) related to oil and gas exploration and production activities upon public lands. This policy, entitled Southwestern Division Policy 1110-2-1156 (SWDP 1110-2-1156), Mineral Exploration and Production Activities in Close Proximity to Flood Risk Management Structures, is focused on protecting the structural integrity of major structures associated with Corps-administered water resource development projects, including but not limited to dams, spillways, gate control structures, and levees, within Southwestern Division. The Southwestern Division encompasses all or parts of Texas, Oklahoma, Kansas, and Arkansas. The CESWD policy is enclosed for your reference and information.

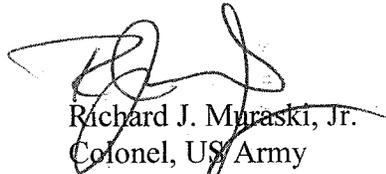
After due consideration of the CESWD policy, and consideration of the public interest under 10 U.S.C. § 2668, the Corps, Fort Worth District (CESWF) is implementing a moratorium through July 1, 2011, on all outgrants in furtherance of oil and gas exploration and production activities upon public lands. During this period, all existing outgrants and applications for oil and gas activities will be reviewed for compliance with SWDP 1110-2-1156.

The Fort Worth District has received increased numbers of applications for oil and gas activities. Some of these activities are in direct support of actions and operations which violate the CESWD policy on oil and gas exploration near critical Corps flood control structures.

Applicants, or their subcontractors, agents, and assignees, who are seeking outgrants for oil and gas activities under 10 U.S.C. § 2668 must comply with SWDP 1110-2-1156. No license, permit, easements, or consents, with the exclusion of Section 404/10 permits, will be issued to an applicant until Fort Worth District Real Estate Division (CESWF-RE) confirms compliance with SWDP 1110-2-1156 on projects within the CESWF area of responsibility. Applications for outgrants that support any activity not compliant with SWDP 1110-2-1156 will not be considered for favorable action.

If you have further questions, please feel free to contact Ms. Anita Branch, Regional Geotechnical Specialist, (817) 886-1703.

Sincerely,



Richard J. Myraski, Jr.
Colonel, US Army
Commanding

Enclosure

Copy Furnished:

Honorable John Cornyn
United States Senate
517 Hart Senate Office Building
Washington, DC 20510

Communications Plan
Review of License Applications in Furtherance of Oil and Gas Exploration
Dated: 16 May 2011

REFERENCES

10 U.S.C. 2668

ER 405-1-12 Chapter 8, Real Property Management

AR 405-80 Management of Title and Granting use of Real property

SWDP 1110-2-1156 Mineral Exploration and Production Activities in Close proximity to Flood Risk Management Structures, 17 March 2011

GOAL

To inform key publics of the Fort Worth District implementing a temporary moratorium through July 1st, 2011 on all outgrants in furtherance of oil and gas exploration and exploitation activities upon USACE managed public lands.

OBJECTIVES

To inform congressional interests, oil and gas outgrantees, and the public of the Fort Worth District's temporary moratorium on all outgrants in furtherance of oil and gas exploration and exploitation activities upon USACE managed public lands.

ISSUES

- CESWF has received increased numbers of applications for oil and gas activities and some of these activities are in direct support of actions and operations which violate the Southwestern Division (SWD) policy on oil and gas exploration near critical U.S. Army Corps of Engineers (USACE) flood control structures.
- SWF is implementing a temporary moratorium through July 1st, 2011 on all outgrants in furtherance of oil and gas exploration and exploitation activities upon public lands.
- During this period, all existing outgrants and applications for oil and gas activities will be reviewed for compliance with Southwestern Division Policy (SWDP 1110-2-1156).
- Applications for outgrants which are not compliant with SWDP 1110-2-1156 will not be considered for favorable action.

AUDIENCES

- Stakeholders: Congressionals, oil and gas outgrantees, affected land owners and local residents.

NOTIFICATIONS

1. SWD notification (letter/email)
2. Congressional notification (letter)
3. Oil and Gas Outgrantee notification (letter)
4. Public notification (news release)

THEMES/MESSAGES

- Public Safety
- Security of our dams and other major water retention structures.

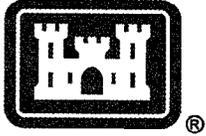
BACKGROUND (TALKING POINTS)

The USACE Districts in the Southwestern Division have recently received a number of inquiries and requests in connection with development of oil and gas production facilities near our dams and levees. They have also received a number of inquiries and requests in connection with development of oil and gas production and transportation of oil and gas through pipelines in close proximity to Corps of Engineers dams. Major natural gas shale formations currently being developed in the Southwestern Division include the Barnett Shale in north Texas, the Caney Shale in Oklahoma, the Fayetteville Shale in Arkansas, and the Haynesville Shale in northwest Louisiana and Texas. Concerns have been raised that these activities could result in damage to dams and other important structures at flood risk reduction projects. The Fort Worth District is in the process of preparing a formal engineering position explaining the risks and recommending a 3,000 foot lateral exclusion zone.

QUESTIONS AND ANSWERS

Q1. Why is a moratorium on all outgrants in furtherance of oil and gas exploration and exploitation activities upon public lands being implemented through July 1st, 2011?

A1. CESWF has received increased numbers of applications for outgrants in furtherance of oil and gas exploration and exploitation activities and some of these activities are in direct support of actions and operations which violate the Southwestern Division (SWD) policy on oil and gas exploration near critical U.S. Army Corps of Engineers (USACE) flood control structures. The moratorium is being implemented to allow time for the USACE to research existing outgrants and applications for compliance with Southwestern Division Policy (SWDP 1110-2-1156).



NEWS RELEASE

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

For Immediate Release:
May 17, 2011

Contact:

Corps review of license application in furtherance of oil and gas exploration

FORT WORTH, Texas – The U.S. Army Corps of Engineers' Fort Worth District has issued a temporary moratorium on all new applications for outgrants in furtherance of oil and gas exploration and exploitation activities upon public lands within the Fort Worth District in accordance with Southwestern Division (SWD) policy SWDP 1110-2-1156, 17 March 2011.

Fort Worth District has received an increased number of applications from oil and gas exploration companies to utilize public land to further the goals of private mineral exploration, extraction, and sale. Some activities associated with these applications are in direct support of actions and operations which violate SWD policy on oil and gas exploration near U.S. Army Corps of Engineers flood control structures.

The moratorium, effective immediately through July 1st, 2011, is being implemented to allow time for the USACE to research existing outgrants and applications for compliance with Southwestern Division Policy (SWDP 1110-2-1156).

After July 1st, 2011, applications for outgrants which are not compliant with Southwestern Division (SWD) policy SWDP 1110-2-1156 will not be considered for favorable action.

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U.S. ARMY CORPS OF ENGINEERS – FORT WORTH DISTRICT
819 TAYLOR STREET
FORT WORTH, TX 76102
WWW.SWF.USACE.ARMY.MIL

Q2. Why a 3000 foot exclusion zone?

A2. Experience at Corps projects led to the adoption of the 3000 foot exclusion zone. At this time CESWF believes that this distance is adequate to protect the integrity of our projects, however, the Corps is conducting scientific studies and analyses to help CESWF prepare a formal engineering position explaining the risks and recommendation a 3000 foot lateral exclusion zone.

Q3. Will current outgrants be affected by this moratorium?

A3. No, current outgrants will not be impacted by this moratorium, only new applications for activities in furtherance of oil and gas exploration and exploitation activities upon public lands will be impacted.

Q4. What will happen after the moratorium is over?

A4. Applications for outgrants in furtherance of oil and gas exploration and exploitation which are not compliant with SWDP 1110-2-1156 will not be considered for favorable action.