

TASK ENGINEERING MANAGEMENT INC.

**PO Box 660548
BIRMINGHAM, ALABAMA 35266
(205) 978-5070**

March 01, 2010

Ms. Elaine Snyder-Conn, Field Survey
U.S. Department of Interior Fish and Wildlife Service
1208 B Main Street
Daphne, Alabama 36526-4119

Re: CDM Mining & Equipment, LLC.
Masseyline Mine

Dear Ms. Snyder-Conn:

Please accept this letter as our request for comments from your office regarding the proposed surface coal mine site of Masseyline Mine.

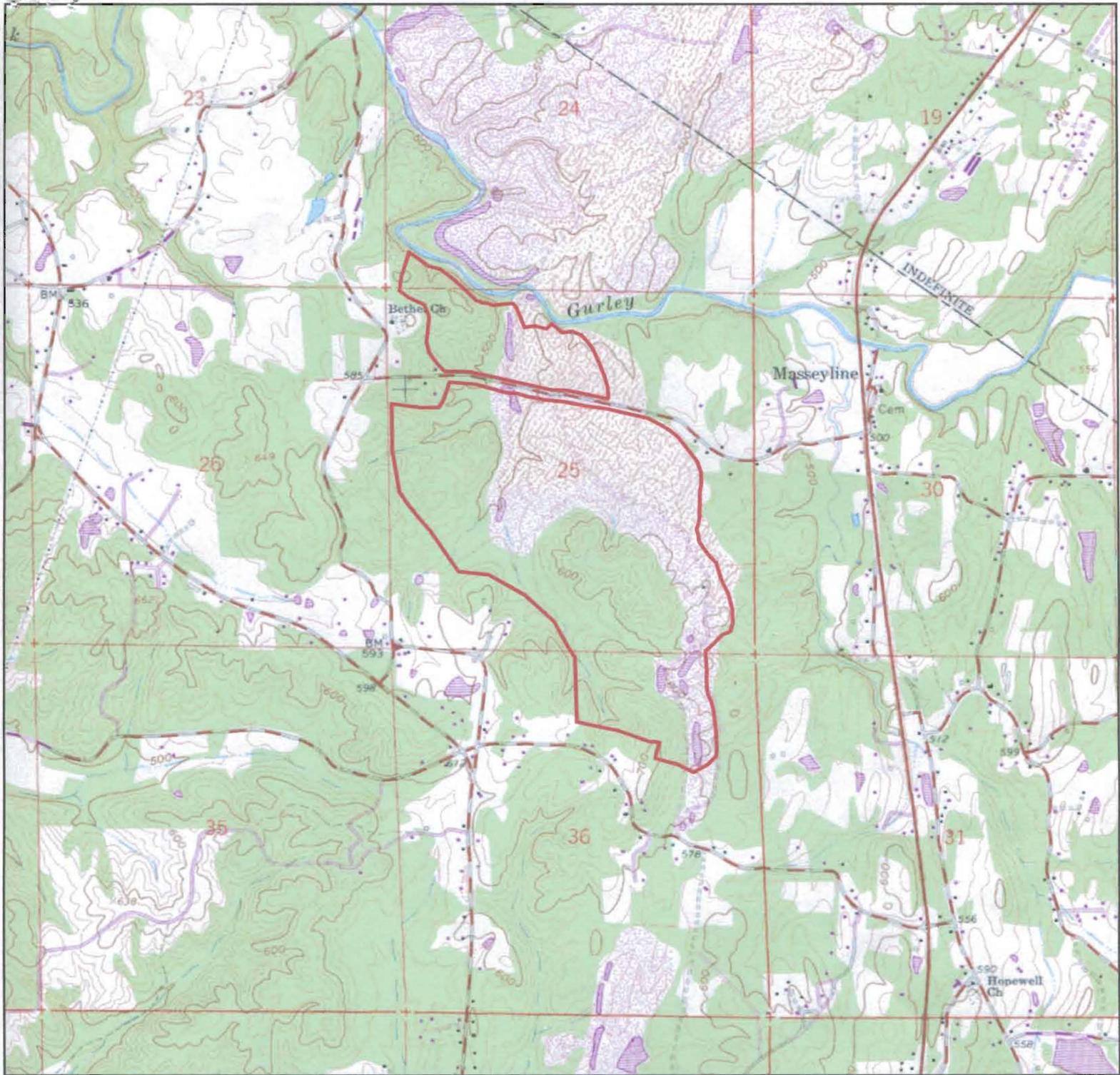
We are in the process of applying for a mining permit on approximately 437 acres in Sections 25 and 26, Township 14 South, Range 2 West as depicted on the Trafford U.S.G.S Quadrangle map located in Walker County, Alabama. The proposed site location is shown on the attached "Project Location Map" included with this request.

If you have any questions or need additional information, please call us at your convenience at (205)978-5070.

Sincerely,



Jerry W. Williams,
Ala. PE #12739



**PROJECT LOCATION MAP
SECTIONS 25 & 36
TOWNSHIP 14 SOUTH, RANGE 2 WEST
JEFFERSON COUNTY, ALABAMA**



**TOTAL PROPOSED DISTURBED AREA - 437.16 ACRES
BASE MAP: TRAFFORD U.S.G.S. QUADRANGLE MAP**

 **PROPOSED PERMIT BOUNDARY**

SHEET	SCALE	CLIENT / MINE	 TASK EMI CONSULTING ENGINEERS <small>P.O. BOX 660548 BIRMINGHAM, ALABAMA 35266 (205) 978-5070 FAX (205)874-6184</small>
1 OF 1	1" = 2000'	CDM MINING & EQUIPMENT, LLC. MASSEYLINE MINE	



United States Department of the Interior

FISH AND WILDLIFE SERVICE
1208-B Main Street
Daphne, Alabama 36526

MAR 17 2010

IN REPLY REFER TO:
2010-TA-0353

Mr. Jerry W. Williams
TASK Engineering Management, Inc.
P.O. Box 660548
Birmingham, AL 35266

Dear Mr. Williams:

Thank you for your March 1, 2010, letter requesting comments on potential impacts to threatened or endangered species as a result of a proposed 437-acre surface coal mine to be operated by Masseyline Mine in Jefferson County, Alabama. The proposed project is located at approximately 33° 47' 18.871" N and 86° 42' 0.736" W and will potentially impact Gurley Creek. We are providing the following comments in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. et seq.) and the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Endangered and Threatened Species

We have determined that the following federally protected species may occur in the project area:

Flattened musk turtle, *Sternotherus depressus* – Threatened
Leafy prairie-clover, *Dalea* (= *Petalostemum*) *foliosa* – Endangered

Recommended Surveys

If the project will have negative impacts on Gurley Creek, such as siltation of aquatic habitats or alteration of the streambeds, we recommend that you conduct a habitat assessment and survey for the flattened musk turtle. The survey should be conducted 100 yards upstream of the project area and extend downstream 400 yards below the project boundary to determine if the flattened musk turtle or other listed species are present. The recommended sampling protocol for the flattened musk turtle is enclosed with this letter. A qualified biologist with a current collection permit from the U.S. Fish and Wildlife Service, who is familiar with these species, should conduct the survey. Please provide us with a description of the surveyor's credentials, survey methods, habitats observed, other species present, and survey results. Photos would be very useful, as would a map demonstrating that survey locations spanned the requested area. If there is no likelihood of negative impacts on Gurley Creek and if appropriate Best Management Practices are implemented to reduce potential erosion in the project area, no further consultation for the flattened musk turtle is necessary.

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PHONE: 251-441-5181



FAX: 251-441-6222

We also recommend that surveys for the leafy prairie-clover be conducted if appropriate habitats exist anywhere within the project zone. Prior experience with this particular species is strongly recommended for the consultant(s) undertaking the survey. A visit to known populations of the leafy prairie-clover immediately prior to any surveys is recommended to become familiar with the species, habitat and condition of plants at that time of year. Surveys cannot be accepted if the plants have no above-ground vegetation at the time of the surveys. Please provide the name of the surveyor, his/her credentials, and a thorough description of survey methods and habitats present, including shrub and forb species observed. If it can be demonstrated that no suitable habitat exists for the leafy prairie-clover within the impacted areas through a detailed description of the plant community (including grasses, forbs, and shrubs) and/or site photographs showing unsuitable habitat throughout the **entire** project area, a species survey is unnecessary (although we would appreciate notification of habitat suitability survey results).

Aquatic Concerns

We recommend a maximum discharge turbidity of 10 NTUs (nephelometric turbidity units) or receiving stream background levels for turbidity in any discharge from your site. We also recommend a vegetated buffer of at least 100 feet for all tributaries.

Additional Recommendations

We recommend adhering to Alabama Surface Mining Commission Administrative Code, Chapter 880-X-10C, PERFORMANCE STANDARDS SURFACE MINING ACTIVITIES, and the development of an erosion control plan tailored to the mining site. We also recommend development of mine plans that closely adhere to protective measures in ADEM regulations sections 335-6-10-.06(a) and (c) to maintain minimum water quality conditions applicable to all State waters.

We would like to emphasize the importance of the following BMPs to control erosion and minimize impacts to aquatic systems:

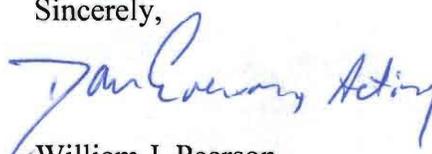
- provide 100-ft naturally vegetated buffers (150-ft in steep areas) adjacent to any streams, ditches, or drainages consisting of trees, shrubs, and grasses, or other herbaceous species to protect surface waters from soil runoff and mining contaminants.
- size settling ponds to accommodate a 25-year, 24-hour rain or flood event and avoid placing ponds in sites with steep topography or in buffer areas.
- inspect BMP structures within 24 hours of each significant rainfall event and take immediate corrective action if erosion or soil runoff is observed.
- monitor water quality (especially turbidity or total suspended solids) to assure that discharges/runoff do not increase stream turbidity above background levels.

- immediately revegetate any disturbed areas not actively mined.
- execute any work that results in exposed earth on slopes leading to wetlands or surface waters during periods when significant rainfall is not predicted.
- maintain the State's standard for pH at all times ("Wastes shall not cause the pH to deviate more than one unit from the normal or natural pH, nor be less than 6.0, nor greater than 8.5" (ADEM 1992)). This is particularly important for sustaining a healthy ecosystem and aquatic fauna.

For additional information regarding best management practices, consult the Alabama Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas (March 2009), available on-line at:
http://swcc.alabama.gov/pages/erosion_control.aspx?sm=b_b.

Upon receipt and review of the recommended species survey reports, we will provide a section 7 review of your project. If you have any questions or need additional information, please contact Ms. Karen Marlowe of my staff at (205) 726-2667. Please use the reference number located at the top of this letter in future phone calls or written correspondence.

Sincerely,



William J. Pearson
Field Supervisor
Alabama Ecological Services Field Office

Enclosure

cc: USACE, Birmingham, AL
ADEM, Montgomery, AL
ADCNR, Montgomery, AL
EPA, Region 4, Atlanta, GA

Flattened Musk Turtle

US Fish & Wildlife Service Recommended Sampling Protocol

The flattened musk turtle (FMT) is a secretive cryptic species that is restricted to the Black Warrior River system, presently believed to occur upstream of the Bankhead Dam in portions of Blount, Cullman, Etowah, Fayette, Jefferson, Lawrence, Marshall, Tuscaloosa, Walker, and Winston Counties. It is seldom observed at the water surface because of its ability to augment its respiration subcutaneously, although it basks occasionally. It generally inhabits streams with drainage areas greater than 8 square miles, relatively clean substrates, and low turbidity, but may be found in suboptimal habitats. FMT may also be found in the lower reaches of smaller streams that flow into larger streams known to harbor FMT, and headwaters and margins of impounded lakes. Its primary food sources are macroinvertebrates, particularly snails, mussels, and insects. A general sampling protocol for this species should include the following considerations:

1. Determine if the aquatic habitat is suitable for this species. Optimal habitat is permanent oligotrophic streams from one to five feet deep containing abundant rocky ledges, slabs, logs, debris, and pools. Generally, aquatic habitats that lack flowing water, relatively clean substrates, benthic macroinvertebrates, and low turbidity are unsuitable. Adequate quantitative and photographic documentation of unsuitable habitat must be presented to the Daphne Field Office if a field survey that includes trapping is thought to be unnecessary by the consultant.
2. Visual searches in lieu of trapping are not acceptable unless a FMT is found and the consultant wishes to report that the FMT is present at a site. In this case, trapping would not be required unless the FMT must be held during construction activities.
3. The requirement of a survey may be waived if the consultant wishes to concur with our records showing FMT occurrence within 5 miles of the project within the last 10 years and FMT do not need to be held during construction activities.
4. Trapper must be experienced with flattened musk turtles and trapping procedures and have proper permits from the state of Alabama and USFWS. Traps should be tagged with Alabama Scientific Collection Permit numbers and the name and phone number of the trapper.
5. To facilitate adequate trapping efficiency, FMT surveys should not be conducted during periods when they are typically inactive (about the second week of October until about the third week of April).
6. Sampling should include baited (chicken parts or canned sardines) trapping efforts (e.g., wire funnel traps) which should be set at 1 trap/20 m of stream length. Traps should be placed in deeper pools (if water temperature is at or below 25°C) and in areas that provide cover (e.g., large boulders, snags). Each trap should be set before nightfall and checked each morning (<14 hours after setting) for a minimum of three consecutive days and nights. If temperatures are above 25°C, traps should be placed in a manner that allows turtles to surface for air at night and then moved to deeper water in the morning and be checked no less than every six hours during the day. Water temperature should be checked at the depth of the trap. Chicken parts should be

suspended from the top of the trap so that it can't be eaten from outside the trap. Sardine cans should only be partially opened so that the turtles can't get it out. Bait should be replaced with fresh bait within 48 hours.

7. For projects that cross or release discharges into streams, the sampling area should extend at least 200 m upstream and at least 400 m (or maximum extent of discharge impacts) downstream.

8. For projects that disturb a stream known to support FMT barriers should be placed approximately 65 m upstream of the project on shallow riffles and approximately 50 m downstream of the project on shallow riffles, where practical and possible. All FMT within the barriers should be removed and held (see #11 below) until the stream disturbance is complete. Barriers should be placed in such a manner that FMT can not pass beyond them and should be maintained daily or more often as necessary. Certain situations may not be conducive to barriers and should be discussed with the Service on a case-by-case basis. The stream bottom should be restored as near as possible to pre-disturbance conditions.

9. Accurate documentation of trapping success and locations of traps must be made.

10. Dead FMTs must be documented and retained and made available to the Service for inspection. The Daphne Field Office should be notified within 24 hours of finding a dead FMT

11. Past experience indicates that, if necessary, FMT can be temporarily held during construction activities for up to 31 days at about 25 degrees C or the ambient temperature of the stream from which they were captured. Each turtle should be placed in its own clear plastic container filled with enough stream water to cover the turtle but allow it to easily surface for air, and covered with a lid to prevent escape. If FMTs are held longer than 3 days, it will be necessary to provide them with suitable food (benthic macroinvertebrates from the stream, supplemented with commercial reptile food and frozen shrimp) and clean stream water on a regular basis.

These guidelines should be followed unless alternate instructions by the Service are provided in writing.

References:

Bailey, M.A. and K.A. Bailey. 1999. Flattened musk turtle mitigation, Southern Natural Gas Company North Alabama pipeline project. Final Report. Subcontract No. 99114, Project No. 6208-0250LSF. Prepared for ENSR by Conservation Services Southeast. Shorter, AL. 33 pp.

Dodd, C.K., Jr., K.M. Enge, and J.N. Stuart. 1988. Aspects of the biology of the flattened musk turtle, *Sternotherus depressus*, in northern Alabama. Bull. Florida State Mus., Biol. Sci. 34(1):1-64.

USFWS. 1997. Biological Opinion of the Southern Natural Gas Company's North Alabama Pipeline Project (FERC 1997:4-15). June 4, 1997. Daphne Field Office. 12 pp.

USFWS. 1990. Flattened musk turtle recovery plan. Jackson, MS. 15 pp.

2010-TA-0353

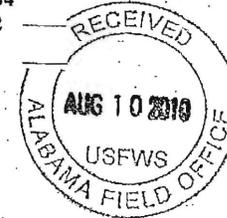
SPECTRUM



Post-it [®] Fax Note	7671	Date	8/23/10	# of pages	3
To	Heath Belyeu				
Co./Dept	Spectrum				
Phone #					
Fax #	205-664-2142				
FROM:	Sandy M				
Co.:	USFWS				
Phone #:	251-441-5184				
Fax #:	251-441-6222				

August 9, 2010

U.S. Fish and Wildlife
Daphne Office
1208-B Main Street
Daphne, Alabama 36526



Attention: Dan Everson

Subject: 2010-TA-0353
Threatened and Endangered Species Concurrence
Section 25, Township 14 South, Range 2 West
Jefferson County, AL
33° 47' 18.871" N, 86° 42' 0.736" W

Dear Mr. Everson:

This letter is in response to your letter dated March 17, 2010 concerning USFWS concurrence for the proposed Masseyline Mine Project located in Jefferson County, Alabama. Spectrum Environmental, Inc. has been contracted by TASK Engineering Management, Inc. to provide the following additional information concerning the above referenced project. The information will help to clarify the project boundary, provide a further description of work, and Best Management Practices that are to be implemented on the project site to protect Gurley Creek and overall water quality of the Locust Fork Watershed.

As outlined in the attached project boundary map (Appendix A,) it can be noted that Gurley Creek does not occur within the project boundary limits. Gurley Creek is located to the north of the project boundary. There is a minimum 100 foot undisturbed buffer from the project boundary in relation to Gurley Creek. A majority of this buffer is currently forested and will remain in this condition throughout the duration of the project. This buffer meets the requirements of a 100 foot undisturbed buffer on intermittent and perennial streams as per the Alabama Surface Mining Commission (ASMC) Performance Standards Code, Chapter 880-X-10C-.28 (1).

Endangered and Threatened Species

The USFWS has determined that the Flattened musk turtle (*Sternotherus depressus*) and the Leafy Prairie-clover (*Dalea foliosa*) may occur in the project area. The USFWS states that "if the project will have negative impacts on Gurley Creek, such as siltation of aquatic habitats or alteration of the streambeds, we recommend that you conduct a habitat assessment and survey for the flattened musk turtle". As noted in the attached figure (2433001-1) the project will not affect Gurley Creek. The proposed mining operation will most certainly disturb the project site, but modern surface water management

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205.664.2000
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practices (mandated to ensure down stream water quality) will be followed as required by regulatory agencies. This is further enhanced by the fact that there are no proposed direct impacts to Gurley Creek (minimum 100' non-disturbance buffer). Current regulations require that project activities not result in adverse effects to water quality. Water quality parameters to be monitored throughout the project are to include, but not limited to, pH, Total Suspended Solids (TSS), Iron, and Manganese. Spectrum believes that the project boundary defines the area of potential impact to species and habitat, which excludes Gurley Creek.

The proposed mining activity will include the ultimate stabilization of the site through modern mining reclamation mandates. Therefore we believe the only long-term effect that the proposed activity could have on a species in Gurley Creek will be positive. It is our opinion the data provided in this letter further concludes the point that there will be no negative impact to Gurley Creek, therefore we feel that any additional surveys are unnecessary.

The USFWS technical document, Recovery Plan for the Leafy Prairie-clover, *Dalea foliosa*, states that the habitat conditions required for the inhabitation of the plant species is "thin soiled mesic and wet mesic dolomite prairie, limestone cedar glades, and limestone prairies". A review of the soil survey for the project area (Attachment) indicates that all of the underlying soil types found within the project site are derived from weathered sandstones and shales and not the limestones and dolomites that are required for the leafy prairie-clover. Given the specific soil types required for the existence of the Leafy Prairie-Clover not being present within the project boundary, Spectrum believes that a field survey for the Leafy Prairie-clover is not warranted.

Aquatic Concerns

The Applicant will adhere to all mandated water quality standards that have been set forth by the regulatory agencies.

Additional Recommendations

The Applicant will adhere to the ASMC Code, Chapter 880-X-10C, Performance Standards Surface Mining Activities, and will develop a site specific erosion control and BMP plan that will be designed for the protection of water quality.

* * * * *

2010-11-05

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Spectrum appreciates your attention in this matter. If you have any questions please contact Heath Belyeu toll free at 1-888-739-0838.

Sincerely,
Spectrum Environmental, Inc.

Heath Belyeu

Heath Belyeu
Project Biologist

Stephen P. Castleman

Stephen P. Castleman, P.G.
President

Attachments: Appendix A – Project Boundary Map
Appendix B – Soil Survey



U.S. Fish and Wildlife Service
1208-B – Daphne, Alabama 36526
Phone: 251-441-5181 Fax: 251-441-6222

Based upon our records and the information provided in your letter, we agree with your findings that no federally listed species/critical habitat occur in the project area. If project design changes are made, please submit new plans for review.

William J. Pearson

William J. Pearson, Field Supervisor

8/20/2010

Date

#6