

R. SERIES/Initials CON10-11 C.A.R.
FACILITY ID 64-01-012
WK ACT/Doc Code CP / GC
Project # / Permit # 07-602 /

01/20/09

Test Piles

**Pre-Public Comment Correspondence
Regarding Test Piles Prior to Permit
Issuance**

Roling, Chris [DNR]

From: Arnold, Alan [AlanArnold@alliantenergy.com]
Sent: Tuesday, January 20, 2009 1:48 PM
To: Roling, Chris [DNR]
Cc: Hillman, Timothy M.
Subject: RE: test piles letter
Attachments: Test Pile Approval letter-IDNR-111507.pdf

Chris- I did find a copy of the test pile letter (attached). I hope this meets your needs.

We are pulling together information to support your information request from Friday, and hope to have that to you very soon.

Alan J. Arnold
Environmental Lead- IPL Baseload Project
Alliant Energy Corporate Services
P.O. Box 351
200 First Street S.E., GO-13th Floor
Cedar Rapids, IA 52406 (52401)
Phone: 319.786.4476
Fax: 319.786.4747



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From: Roling, Chris [DNR] [mailto:Chris.Roling@dnr.iowa.gov]
Sent: Tuesday, January 20, 2009 10:28 AM
To: Arnold, Alan
Subject: test piles letter

Alan,

I am getting all of the documentation together for scanning/copying for the public comment period. As I was going through the information I found your letter concerning the request on the test piles. However, I did not find a signed copy of my response to you nor did I find a copy of the green card.

Just to make sure the record is complete could you verify that you received a signed letter from me by responding to this email with a scanned copy of the signed letter that I sent to you? Thanks,

Chris

Christopher A. Roling, PE
Environmental Engineer Senior
Air Quality Bureau, IDNR
ph: 515-242-6002
fax: 515-242-5094



STATE OF IOWA

CHESTER J. CULVER, GOVERNOR
PATTY JUDGE, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
RICHARD A. LEOPOLD, DIRECTOR

November 15, 2007

CERTIFIED MAIL

Alan J. Arnold
Interstate Power and Light Co.
Alliant Tower
200 First Street SE
PO Box 351
Cedar Rapids, IA 52406-0351

Re: Plant Number 64-01-012, Project Number 07-602, Allowable Test Piles Operation Prior to Construction Permit Issuance.

Dear Mr. Arnold:

The Department has reviewed your letter of November 5, 2007 concerning the test pile operations at the site of the proposed Unit 4 for the Sutherland Generating Station (SGS) in Marshalltown, Iowa. According to the information supplied in the letter there will be approximately 34 test piles used to determine proper pile and foundation design for the proposed new unit. Also, the test piles will be abandoned in place and not utilized for construction of the facility.

The question of what type of construction activities may be conducted prior to the issuance of a Prevention of Significant (PSD) permit has been covered by an EPA policy since 1978. On December 18, 1978 EPA issued a memorandum specifying activities such as planning, ordering of equipment & material, site clearing, grading, and on-site storage of equipment & materials could occur prior to the issuance of a PSD permit. Any activities undertaken prior to issuance of a PSD permit would be solely at the owner's or operator's own risk with no guarantee of a PSD permit being issued. This same memo stated

"All on-site activities of a permanent nature aimed at completing a PSD source for which a permit has yet to be obtained are prohibited under all circumstances. These prohibited activities include installation of building supports and foundation, paving, laying of underground pipe work, construction of permanent storage structures, and activities of a similar nature."

Since the test piles are for the purpose of preparing the site and will not be used for the construction of the new boiler at the facility the Department is allowing Interstate Power and Light to proceed with the test pile operation. If you have any questions, feel free to contact me by phone at (515) 242-6002 or by email at chris.roling@dnr.iowa.gov.

Sincerely,

Christopher A. Roling, PE
Environmental Engineer Senior
Air Quality Bureau, IDNR

C: Bob Webber, EPA Region VII
Field Office 5

Roling, Chris [DNR]

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An Alliant Energy Company

Corporate Headquarters
Alliant Tower
200 First Street SE
P.O. Box 351
Cedar Rapids, IA 52406-0351

Office: 1.800.822.4348
www.alliantenergy.com

November 5, 2007

Dave Phelps
Construction Permitting Supervisor
Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite 1
Urbandale, IA 50322

Subject: Allowable Test Pile Operations Prior to Construction Permit Issuance

Dear Mr. Phelps:

Interstate Power and Light (IPL) has identified the need to conduct limited test pile operations at the site of the proposed Sutherland Generating Station (SGS) Unit 4 in Marshalltown, Iowa. The purpose of the test pile operation is to facilitate proper pile and foundation design for the proposed new unit at SGS.

The test pile operation is expected to include approximately 34 piles. For comparison purposes, it is anticipated that the actual pile effort that will be needed for the project is estimated at 6,100 piles. A brief description of the test pile effort has been included for informational purposes. As noted in that description, the test piles will be abandoned in place and not utilized for construction of the facility.

IPL would like to confirm through written response from the Department that conducting this test pile operation is allowable in advance issuance of the air construction permits for the project. As noted above, the purpose of this test pile operation is to facilitate proper pile and foundation design. As such, this effort is not designed to trigger commencement of construction prior issuance of the air construction permits for the new unit.

If you need additional information regarding the test pile operations, please contact me at 319-786-4476 or AlanArnold@alliantenergy.com. We would like to initiate test pile operations in early December. A response at your earliest convenience would be greatly appreciated

Sincerely,

A handwritten signature in black ink, appearing to read "Alan V. Arnold".

Alan V. Arnold
Senior Environmental Specialist
Interstate Power and Light Company

cc: Jeff Beer, IPL Project Director
Chad Daniel, Senior Environmental Scientist, Stanley Consultants

RECEIVED

NOV 13 2007

Pile Load Test Scheme

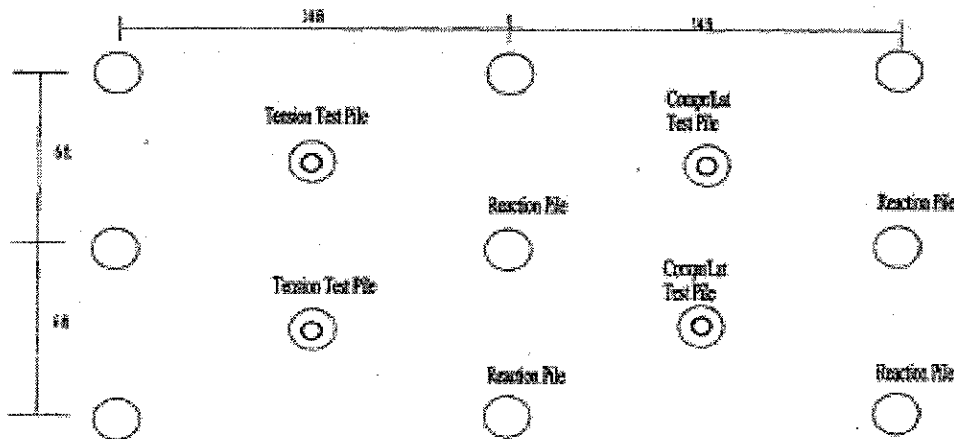
Test piles will be installed in groups of two, one for the lateral and compression load tests and one for the tension test. The two test piles in each group will have equal diameter and length. Five groups of test piles are forecasted.

Reaction piles are required to apply the loads during the pile tests. The test load frame is attached to and supported by the reaction piles during testing. Typically, each test pile is centered within four reaction piles spaced in a rectangular grid. Reaction piles can be shared between test piles in a group or groups. For a test pile group, 6 reaction piles are needed. For two adjoining test pile groups, nine reaction piles are needed.

Test pile groups will be located in the powerblock and coal handling areas. Two test pile groups will be located in the vicinity of the boiler / turbine structures. Two test pile groups will be located in the vicinity of the chimney. One test pile group will be located in the vicinity of the coal handling area east of the powerblock. For this scenario, 34 total piles would be installed.

A typical test pile lay-out is provided below.

Test piles and reaction piles should be located outside the footprint of the planned structures in order to not interfere with the installation of production piles during actual construction. The test piles and reaction piles will be abandoned in place once testing concludes. These piles can be cut off at the surface and will eventually be buried once the fill placement in the powerblock area commences.



Roling, Chris [DNR]

From: Arnold, Alan [AlanArnold@alliantenergy.com]
Sent: Monday, November 12, 2007 9:27 AM
To: Phelps, Dave [DNR]
Cc: Roling, Chris [DNR]; Daniel, Chad
Subject: Test Piles
Attachments: 2842_001.pdf

Dave- the following letter was put in the mail this morning to your attention. Attached is an electronic copy. If you have any questions, please feel free to contact me.

Alan J. Arnold

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Alliant Energy Corporate Services
P.O. Box 351
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