

IOWA DEPARTMENT OF NATURAL RESOURCES

ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF:

MARTIN & DORIS ZAUGG
POCAHONTAS COUNTY, IOWA

ADMINISTRATIVE CONSENT
ORDER
NO. 2010-FP-02

TO: Martin & Doris Zaugg
1115 Birch Ave.
Ottofen, IA 50570-9708

I. SUMMARY

This Administrative Consent Order (Order) is entered into between Martin & Doris Zaugg and the Iowa Department of Natural Resources (Department) for the purpose of resolving violations of Iowa's requirements pertaining to flood plain development. In the interest of avoiding litigation, the parties have agreed to the provisions set forth below.

Any questions or response regarding this Order should be directed to:

Relating to technical requirements:

Dave Allen
Water Resources Section
Iowa Department of Natural Resources
Henry A. Wallace Building
Ph: (515) 281-6930
Fax: (515) 281-8895

Relating to legal requirements:

Randy Clark, Attorney II
Iowa Department of Natural Resources
Henry A. Wallace Building
Des Moines, Iowa 50319-0034
Ph: (515) 281-8891

II. JURISDICTION

This Order is issued pursuant to Iowa Code subsection 455B.279 which authorizes the Director to issue any Order necessary to secure compliance with or prevent a violation of Iowa Code sections 455B.261 through 455B.281 or the rules adopted pursuant thereto, and Iowa Code section 455B.109 and 567 Iowa Administrative Code (IAC) Chapter 10, which authorize the Director to assess administrative penalties.

III. STATEMENT OF FACTS

The Department has determined the following findings. Martin and Doris Zaugg neither admit nor deny any violations of Iowa law.

1 Martin and Doris Zaugg (the Zauggs) own and operate a dam (Zaugg Dam) across an unnamed Lizard Creek tributary located in the SW¼ of Section 2, T90N, R31W (Lizard

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Township), Pocahontas County, Iowa. The Zaugg Dam consists of a 500 foot long earth fill embankment with a maximum height of 40 feet. The Zaugg Dam creates an 183 acre impoundment with a permanent water storage volume of approximately 182 acre-feet. The Zaugg Dam is considered to be a low hazard, non-major structure.

2. On February 3, 2000, staff from Department Field Office #3 (FO3) investigated an inquiry concerning a dam that was recently constructed at the above-described location. FO3 staff confirmed that a dam apparently meeting the Department's threshold for a flood plain development construction permit had been constructed. By letter dated February 7, 2000, FO3 notified the Zauggs that construction of the dam without first obtaining a construction permit constituted a violation of state law and directed the Zauggs to submit a completed construction permit application. By letter to the Zauggs dated February 18, 2000, FO3 confirmed receipt of a completed application and indicated it would be forwarded to the Department's Water Resources Section in Des Moines for processing. However, the Water Resources Section did not receive the application and did not inquire concerning the status of the project.

3. By letter to the Department dated June 25, 2004, the Pocahontas County Engineer expressed concern about the safety of the Zaugg dam and requested Department evaluation. By letter to the Zauggs dated July 12, 2004, the Department directed the Zauggs to seek after-the-fact approval of the Zaugg Dam or return the area to pre-project conditions. The Department received the construction permit application on July 20, 2004; also included was information indicating that the Natural Resource Conservation Service answered questions from the Zauggs regarding a potential lake at the above-described location in 1984.

4. By letter dated October 18, 2004, the Department notified the Zauggs that additional information was necessary to process the after-the-fact application, including engineering plans and specifications, hydraulic modeling, a hazard class assessment and information pertaining to the construction materials and techniques employed in the original construction as built. The Zauggs were also informed regarding the required procedures if they chose to remove the unauthorized dam. The Department directed the Zauggs to indicate how they wished to proceed (compliance option) by November 15, 2004. In response to a request by the Zauggs' attorney, the Department extended the response deadline to December 15, 2004. By letter to the Department dated December 15, 2004, the Zauggs' attorney indicated that the Zauggs wanted to seek after-the-fact approval but that they needed additional time to locate a qualified engineer.

5. On July 21, 2005, the Pocahontas County Engineer notified the Department that the Zauggs' contractor was planning to install riprap on the Zaugg Dam.

6. By letter to the Zauggs dated August 3, 2005, the Department required that the Zauggs respond in writing with their compliance option by August 22, 2005. On August 22, 2005, the Department received as-built plans and a construction report from the Zauggs' engineer.

7. On August 24, 2005, FO3 staff inspected the Zaugg Dam and observed recently placed riprap and straw bales in an apparent effort to address erosion problems on and downstream of the Zaugg Dam.

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8 On October 27, 2005, Department FO3 and Central office staff inspected the Zaugg Dam, accompanied by the Zauggs. Numerous observations led to the Department's conclusion that the Zaugg Dam is in poor physical condition:

The downstream embankment slope is unstable. Riprap was placed on the slope in an effort to increase its stability, however the riprap is most likely adding to the instability by placing additional load on the embankment and creating a condition for further erosion of the embankment leading to increased instability. The auxiliary spillway located at the west end of the dam is not stable. It ends abruptly at an overfall which is creating localized embankment instability. In addition, the curved alignment of this auxiliary spillway will result in poor performance which will most likely result in premature overtopping of the spillway walls at less-than-design flows. Seepage through the embankment at the location of the auxiliary spillway outlet was also detected. While seepage through dams is not unusual, if not properly collected and discharged, such as in this case, it could lead to serious problems.

The principal spillway conduit joints and seams have numerous leaks, suggesting less than desirable conduit quality or improper installation. Continued seepage through the conduit joints could result in loss of soil material surrounding the conduit as a result of the soil being transported by the seep water. The soil loss can become progressively worse until a void along the conduit from impoundment to the downstream toe is created resulting in a sudden rush of water through the void and eventual failure of the entire dam. There is currently evidence of water flow under the conduit. The extent of internal erosion as the result of the flow under the conduit was not determined. Shortly after the inspection a hydraulic analysis was undertaken using the submitted as-built plans and other available information. That analysis indicated that the dam is not capable of passing the freeboard design storm without exceeding the top of dam.

9 By letter dated November 23, 2005, the Department notified the Zauggs that the Zaugg dam was hydraulically inadequate and structurally unsound. Due to instability of the dam and the possibility of failure of the dam, the Zauggs were directed to lower the water level in the impoundment by a minimum of 20 feet beginning no later than December 15, 2005, and to maintain that level until the dam can be properly removed or modified to meet Department criteria pursuant to a flood plain permit.

10 By letter to the Department dated December 8, 2005, the Zauggs' engineer requested: the Department's concurrence with a preliminary proposal to bring the Zaugg Dam into compliance with Department requirements; and that the Department not require the lowered water level until the Zaugg Dam is reconstructed. By letter to the Zauggs dated December 21, 2005, the Department expressed conceptual concurrence with the preliminary proposal and directed that engineering plans for the proposal be submitted by February 28, 2006. The Department also agreed to extend the water level drawdown deadline to April 1, 2006, provided weekly inspections are conducted and the Department is informed of specified conditions indicating instability.

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11. By letter to the Department dated January 5, 2006, downstream landowners (Abens Trust) informed the Department that a portion of the Zaugg Dam was built on their property without permission and that they would not allow any further encroachment in the future. On March 25, 2006, the Department received information from the Zauggs indicating that they were attempting to negotiate an agreement with Abens Trust regarding further encroachment necessary to stabilize the downstream embankment slope of Zaugg Dam. The Zauggs also indicated that they would begin to drawdown the water level the next week.

12. By letter dated February 5, 2007, the Department reminded the Zauggs that engineering plans for the proposed modifications to the Zaugg Dam were due by February 28, 2006. The Zauggs were directed to inform the Department by March 15, 2007 whether they chose to remove the Zaugg Dam or modify it to satisfy Department requirements. By letters to the Department dated February 12 and 23, 2007, the Zauggs' attorney inquired whether the Department had initiated formal enforcement action. By letters dated February 19 and March 5, 2007, the Department advised the Zauggs' attorney that the Zaugg Dam continues to violate Iowa law and that the Department would initiate formal enforcement action if the matter was not resolved in the near future.

13. On August 1, 2008, the Zauggs and Department officials met to discuss their respective positions.

IV. CONCLUSIONS OF LAW

1. Iowa Code subsection 455B.275(1) prohibits the erection, use or maintenance of a dam in the floodway or flood plain which adversely affect the efficiency of or unduly restrict the capacity of the floodway and declares it to be a public nuisance. The Department is authorized, pursuant to Iowa Code subsection 455B.275(2), to commence, maintain, and prosecute any appropriate action to enjoin or abate the above-described nuisance and any other nuisance which adversely affects flood control. Iowa Code subsection 455B.275(3) requires that approval be obtained from the Department if a person desires to construct or maintain a dam in any floodway or flood plain as defined in Iowa Code section 455B.261.

2. Iowa Code subsection 455B.275(8) requires the Environmental Protection Commission to establish regulatory thresholds by administrative rules. The regulatory thresholds are set forth in 567 IAC Chapter 71. More specifically, 567 IAC 71.3 requires Department approval for the construction, operation and maintenance of a dam in the floodway or flood plain of any water source when the dimensions or effects of such dam exceeds the thresholds established in said rule. Inasmuch as the foregoing facts document that the Zaugg Dam has a permanent storage volume exceeding 18 acre-feet and a height exceeding 5 feet, it exceeds the approval threshold set forth in 567 IAC 71.3(1)"b". Therefore, the Zaugg Dam must either be removed or modified in a manner which allows the issuance of a flood plain development permit.

V. ORDER

THEREFORE, the Department hereby orders and the Zauggs consent to do the following:

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No later than March 31, 2010, request approval of a proposal to modify Zaugg Dam by submitting an application and supporting engineering plans for the changes in the dam certified by a registered professional engineer as specified in 567 IAC 70 4(3)"a" The proposal must be designed to satisfy all Department criteria for low hazard, non-major dams as provided in 567 IAC 72 3 Providing Department approval is obtained no later than May 15, 2010, modification measures in accordance with the approved proposal must be completed by December 1, 2010.

VI. PENALTY

1 Iowa Code subsection 455B 279(2) authorizes the assessment of civil penalties of up to \$500 00 per day per violation of flood plain laws, rules or permits

2 Iowa Code section 455B 109 authorizes the Environmental Protection Commission to establish by rule a schedule of civil penalties up to \$10,000 00 which may be assessed administratively. The Commission has adopted this schedule with procedures and criteria for assessment of penalties; 567 IAC Chapter 10 However, in view of the remedial measures required in this Order, the Department has determined that the most effective and efficient means of addressing the above-cited violations is the issuance of an Order without a penalty

VII. WAIVER OF APPEAL RIGHTS

Iowa Code subsections 455B 279(1) and 561 IAC 7.5(1), as adopted by reference by 567 IAC chapter 7, authorize a written notice of appeal to the Environmental Protection Commission This Order is entered into knowingly by and with the consent of the Zauggs. By signature to this Order, all rights to appeal this Order are waived by the Zauggs

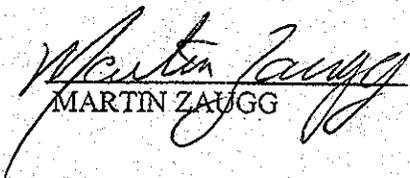
VIII. NONCOMPLIANCE

Failure to comply with this Order may result in the imposition of administrative penalties or referral to the Attorney General to obtain injunctive relief and civil penalties pursuant to Iowa Code section 455B 279 Compliance with provision "V Order," above, constitutes full satisfaction of all requirements pertaining to the violations described in Division IV of this Order



RICHARD A. LEOPOLD, DIRECTOR
IOWA DEPARTMENT OF NATURAL RESOURCES

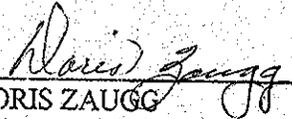
Dated this 3 day of
Feb., 2010



MARTIN ZAUGG

Dated this 27 day of
January, 2010

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DORIS ZAUGG

Dated this 27 day of

January, 2010.

Field Office 3; Randy Clark; Dennis Ostwinkle; EPA; III A 1