

Program Evaluation

Industrial & Energy Minerals Bureau

DEQ Permitting & Compliance Division



ENVIRONMENTAL QUALITY COUNCIL

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Introduction

The Environmental Quality Council is required to evaluate programs within the Department of Environmental Quality pursuant to 75-1-324, MCA. That law requires the EQC to “review and appraise the various programs and activities of the state agencies, in the light of the policy set forth in 75-1-103, for the purpose of determining the extent to which the programs and activities are contributing to the achievement of the policy and make recommendations to the governor and the legislature with respect to the policy.”

The policy reads as follows:

The legislature, recognizing the profound impact of human activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and new and expanding technological advances, recognizing the critical importance of restoring and maintaining environmental quality to the overall welfare and human development, and further recognizing that governmental regulation may unnecessarily restrict the use and enjoyment of private property, declares that it is the continuing policy of the state of Montana, in cooperation with the federal government, local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which humans and nature can coexist in productive harmony, to recognize the right to use and enjoy private property free of undue government regulation, and to fulfill the social, economic, and other requirements of present and future generations of Montanans.

The council allocated 68 hours of staff time to evaluate each four bureaus within the Permitting and Compliance Division of the DEQ that do not deal primarily with water. The Industrial and Energy Minerals Bureau includes the Coal and Uranium Program and the Opencut Mining Program.

Coal and Uranium Program

Background

At the start of the 1973 Legislature, Gov. Thomas Judge urged legislators to pass the strongest strip mining regulations in the history of the country.¹

Much of the language reflected in today’s laws regulating coal and uranium mining was passed by the Legislature that session. Prior to that, according to testimony, the state exercised little control over coal mining reclamation. The Montana Power Co. purchased the rights to the coal mine in Colstrip in 1959 and later announced plans to build coal-fired electrical plants. Plants 1 and 2 came online in the mid-1970s and plants 3 and 4 started a decade later.²

In 1977, President Jimmy Carter signed into law the Surface Mining Control and Reclamation Act. The act allowed state programs to continue to regulate strip mining if their laws were at least as stringent as federal law and were approved by the federal government.

Montana amended its law in 1979 and has operated its regulatory program under the oversight of the Office of Surface Mining Reclamation and Enforcement within the U.S. Department of Interior ever since.

¹ “The Crisis in Energy: Strip Mining Laws”, High Country News, Friday, Feb. 16, 1973.

² [About Colstrip](#), City of Colstrip.

Permitting

A permit application must include all lands the operator anticipates would be mined in the foreseeable future. Permits are issued for five years and are renewable every five years, provided the operator is in compliance with the permit and the reclamation plan. In general, reclamation and revegetation must be completed as rapidly, completely, and effectively as the most advanced technology will allow.³

The application must include detailed plans for the mining and reclamation of land and water that would be affected by the mine. The law defines reclaimed land as land that capable of supporting the uses that existed prior to mining, or higher and better uses.⁴

Among other things, the application must include information on the area's climate, geology, surface water, ground water, vegetation, and fish and wildlife. Among other things, the reclamation plan must address grading, backfilling, water control, and coal conservation. It must detail measures to eliminate damages to landowners and other member of the public, public roads, streams, and other public property.⁵

Enough bond must be posted to reclaim the mine at any time during the permit period. The minimum bond is at least \$200 an acre, with a total minimum bond of \$10,000.⁶

The timeline for permit review follows:⁷

- The department has 90 days to determine if it contains the items required by law.
 - If the application is administratively complete, notice of the application must be published by the applicant once a week for four consecutive weeks in a newspaper in the area of the proposed mine. The department shall notify various local governmental bodies, planning agencies, sewage and water treatment authorities, and water companies in the locality in which the proposed mining will take place of the application and provide a reasonable time for them to submit written comments.
 - Any person having an interest that is or may be adversely affected or the officer or head of any federal, state, or local governmental agency or authority may file written objections to the proposed initial or revised application for permit or major revision within 30 days of the applicant's published notice.
 - If written objections are filed and an objector requests an informal conference, the department shall hold an informal conference in the locality of the proposed operation within 30 days of receipt of the request.
- The department must continue its review of the application for compliance with state law and regulations despite an informal conference. The department may propose changes to the application.
- Within 120 days of determining that the application is administratively complete, the department must notify the applicant if the application is acceptable.
 - Notice of an acceptable application is published once a week for two weeks in a local newspaper by the department. Any person adversely affected by the decision may file a written objection or request an informal conference.

³ 82-4-221 and 82-4-231, MCA.

⁴ 82-4-203, MCA.

⁵ 84-2-222, MCA.

⁶ 82-4-223, MCA.

⁷ 82-4-231, MCA.

- The conference must be held within 20 days of the request. The department must issue its decision within 10 days of the conference.
- Within 45 days of determining an application is acceptable, the department must grant or deny the permit.
 - Any person adversely affected by the permit decision has 30 days to detail why the decision was in error and request a hearing before the Board of Environmental Review, which shall issue a decision within 20 days.
 - Reasons for denying a permit include an inadequate reclamation plan, mining is proposed on a significant alluvial valley floor, or the mine would pose a threat to public health or critical biological productivity.⁸

Electronic Permitting

In March 2015, the program launched an online permitting system. Instead of stacks of paper documents, the system has built-in checklists for required items and will allow several staffers to work on the same document at the same time.

Prospecting

Prospecting to determine the location, quality, or quantity of coal that will remove more than 250 tons of coal must include a bond and a reclamation plan similar to that required for a permit. However, changes to the law in 2011 and 2013 established new requirements for smaller prospecting operations that do not substantially disturb the land surface. The drilling of holes, disposal pits, and installation of ground water monitoring wells are not considered substantial disturbances. Smaller operations are still subject to public notice and comment, bonding, and reclamation, but the prospecting permit could be issued in just over a month depending on any deficiencies and comments.⁹

A bond must be posted for at least \$200 an acre, with a minimum bond of \$10,000.¹⁰

There are six companies with prospecting permits at this time.

Current Permitted Activity

There are seven companies permitted to mine coal in Montana. None are permitted for uranium or in situ coal gasification, which was defined by the 2011 Legislature as “a method of in-place coal mining where limited quantities of overburden are disturbed to install a conduit or well and coal is mined by injecting or recovering a liquid, solid, sludge, or gas that causes the leaching, dissolution, gasification, liquefaction, or extraction of the coal.”

Two applications for new mines are under review. Otter Creek Coal is the only company proposing a new mine. In March, the DEQ issued a list of deficiencies in need of correction before it can be determined if the application is acceptable. Western Energy has applied for a new expansion of the Rosebud Mine. The agency is reviewing the company’s most recent response to deficiencies.

⁸ 82-4-227, MCA.

⁹ 84-2-226, MCA.

¹⁰ 82-4-223, MCA.

The table below shows permitted acreage and bond retained for 2014. This is a [link](#) to the entire 2014 annual report.

Company	Acreage Permitted	Bond Retained
BIG SKY COAL COMPANY	2,161	\$1,788,530.72
BIG SKY COAL COMPANY	5,472	\$3,391,302.80
COAL CREEK	120	\$0
DECKER COAL COMPANY	4,361	\$68,546,782
DECKER COAL COMPANY	7,357	\$63,892,855
SIGNAL PEAK ENERGY	7,735	\$11,700,000
SPRING CREEK COAL COMPANY	9,115	\$124,704,268
WESTERN ENERGY	1,485	\$1,190,812
WESTERN ENERGY	6,058	\$48,403,696
WESTERN ENERGY	9,382	\$56,207,281
WESTERN ENERGY	4,191	\$19,120,740
WESTERN ENERGY	4,554	\$20,134,194
WESTMORELAND RESOURCES INC.	7,110	\$25,550,593
WESTMORELAND SAVAGE CORP.	1,284	\$7,936,457
TOTALS	70,385	\$452,567,511.52

Inspections and Enforcement

Each active mine is inspected monthly with more in-depth inspections occurring quarterly. Inactive sites are inspected once a quarter.¹¹

During the reporting period of fiscal years 2012 and 2013, eight notices of noncompliance were issued and one remained from the previous period. The notice includes a requirement to abate the violation. Seven of the current notices were abated as well as the older one. No major or significant violations that meet the definition of imminent harm were issued.

Violations are identified during field inspections and reviews of submitted annual reports and through self-reporting. Violations included two for failure to properly publish blasting notice, two for not following the approved water monitoring plan, two for not maintaining adequate sediment control, one for improper construction of roads and drill pads, and one for implementation of a minor revision prior to approval. Five of the violations were considered administrative and three were considered environmental harm.

The enforcement division managed 12 coal mining administrative enforcement cases. Six were ongoing from the previous reporting period. As of the end of the reporting period, all 12 cases were closed. A total of \$63,138 of administrative penalties was collected.

Fiscal Overview

The Coal and Uranium Program has an annual budget of about \$2.4 million. The coal severance tax provides \$250,000 a year.¹² Another \$154,000 comes from the natural resources operations account.¹³ And more than \$1.6 million is provided by the federal government. The federal money is part of the federal reclamation law and because the state performs the permitting function on federal lands.

The program currently has 16.56 full-time equivalent employees including four mining engineers, five hydrologists, a soil scientist, and an ecologist.

¹¹ Environmental Enforcement and Compliance [report to EQC](#), 2014.

¹² 15-35-108(8), MCA.

¹³ 15-38-301, MCA.

Audits

The Coal and Uranium Program has not been the subject of a legislative performance audit. However, the program is subject to [oversight and evaluation](#) by the federal Office of Surface Mining Reclamation and Enforcement. There are a number of areas subject to federal oversight, including:

- [Off-site impacts](#): These are anything resulting from mining or reclamation that causes a negative effect on people, land, water, or structures outside the permit area. In addition to field evaluations, the federal agency examines inspection reports, enforcement actions, civil penalty assessments, citizens' complaints, special studies, and information from other environmental agencies. In fiscal year 2014, the agency recorded no off-site impacts.
- [Customer service](#): In 2014, the federal agency looked at document availability and responsiveness to permit applicants. The agency found Montana “responds to permit applicants in a timely and thorough manner, and interacts well with members of the public or other agencies when assistance or services are requested.” There was one citizen complaint filed in the year. The report said citizen complaints are handled professionally and in accordance with the law.
- [Reclamation success](#): Montana has four phases of bond release. The first phase is completed backfilling, regrading and drainage followed by soil replacement and establishing vegetation. Phase III is revegetation consistent with the post-mining use. And phase IV, which the federal agency points out is specific to Montana, is the complete reclamation of all disturbed lands within a drainage basin.
 - Of the almost 40,000 acres of land historically disturbed, the agency found:
 - Almost half have received Phase I release;
 - About one-third have received Phase II release;
 - Less than 10% have been released for Phase III. Over the last eight years, the Phase III bond release increased from an average of 2 acres a year to almost 300 acres a year.
 - Less than 1% has achieved the hydrologic reclamation required by Phase IV. The agency notes that application for release from Phases III and IV does not typically occur until the end of the mining operation. In regards to Phase IV, the agency notes that the small percentage has been misconstrued as poor reclamation. However, the agency says that the full reclamation of a drainage can be delayed by a haul road that cuts across drainages that have otherwise been fully reclaimed.
- Special study topics.
 - In 2014, the federal agency evaluated compliance with underground development waste and coal processing waste at the Signal Peak mine. It found DEQ is effectively monitoring the waste and works with the mine operator to remediate issues.
 - The Western Organization of Resource Councils suggested the federal agency and Montana evaluate topsoil handling practices. The federal agency said it would evaluate practices at up to four sites. That report is not yet available on the OSM website.

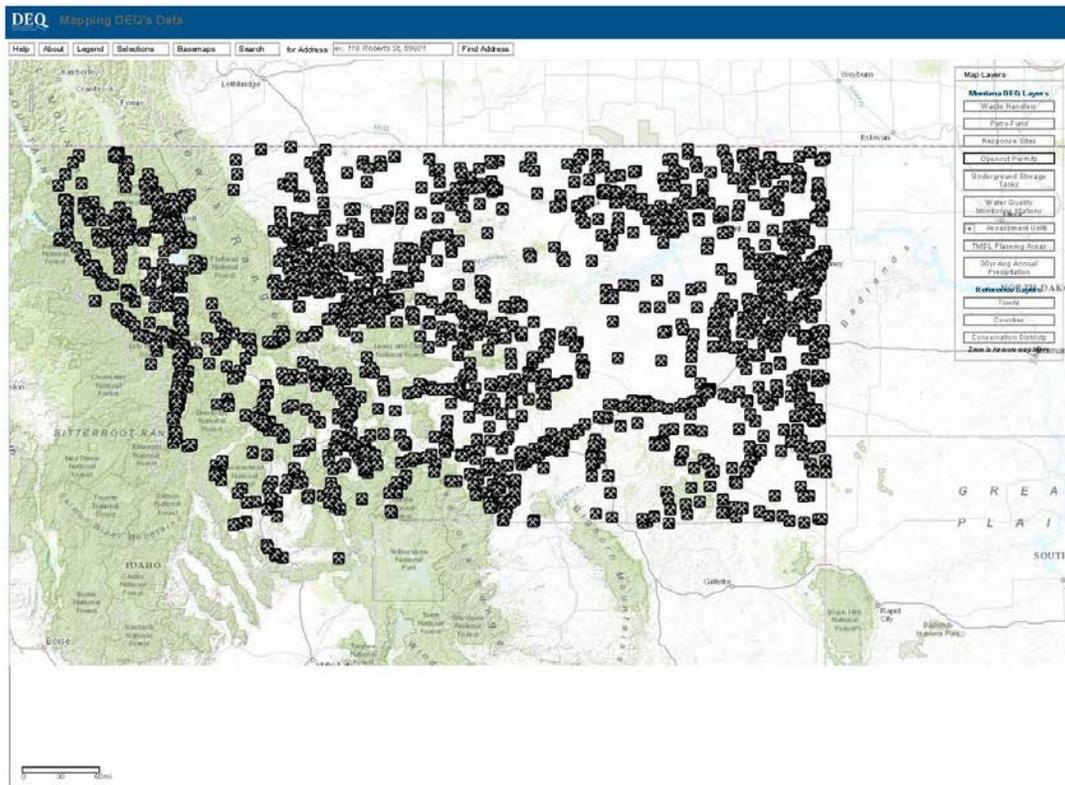
Opencut Mining

Background

Prior to 1973, opencut mining was regulated under the same program as strip mining. In that year's session, the Legislature passed separate reclamation acts for coal and uranium strip mining and opencut mining. Materials covered under the opencut program are bentonite, clay, scoria, peat, sand, soil, gravel, or mixtures of those substances. However, of the approximately 2,000 active permits, about 95% of those are for gravel or scoria.

As shown by the map, opencut mines are located widely across the state.

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<http://svc.mt.gov/deq/wmadst/>

8/8/2015

A permit and reclamation plan is required for:¹⁴

- a mine where more than 10,000 cubic yards of materials and overburden is removed;
- where an operator may have more than one mine that separately removes less than 10,000 cubic yards of materials and overburden, but the sum of the materials and overburden removed exceeds that amount;
- a site where the amount of materials and overburden previously removed, combined with new mining, exceeds 10,000 cubic yards of materials and overburden.

¹⁴ 82-4-431, MCA.

In 2013, the Legislature created a provision that allows an existing permit holder to open a “limited opencut” site without applying for a new permit or amendment if:¹⁵

- the mine is located more than one mile from the operator's nearest existing limited opencut operation;
- the total amount of materials and overburden removed does not exceed 10,000 cubic yards and the total area from which the materials and overburden are removed does not exceed five acres; and
- the operator either reclaims the limited opencut mine within one year, or submits a standard permit application and reclamation plan within six months.

Since the limited opencut provision went into effect, 32 limited opencut operations were established by counties and 23 by private companies.

Reclamation is defined as the reconditioning of the land affected by opencut mining to make the area suitable for productive use, including but not limited to forestry, agriculture, grazing, wildlife, recreation, or residential or industrial development.¹⁶

Bonding of opencut mines is at least \$200 an acre up to an amount determined by the department to reclaim the affected land. The average bond per acre is between \$2,000 and \$3,000. The minimum bond amount is about \$9,000 for an opencut site. Opencut mines operated by the state, federal agencies, counties, cities, or towns are not required to post bonds.¹⁷

The chart below reflects applications received by the department for the last several years. The department attributes much of the growth to oil and gas development in eastern Montana. These applications include requests for permits and amendments to existing permits, but the numbers also include the limited opencut applications, requests for meetings with applicants prior to applying for a permit, complaints, permit transfers, and mining applications in areas that were previously permitted but not bonded.

2008	2009	2010	2011	2012	2013	2014
170	141	189	265	323	259	238

Permitting Process and Timelines

In 2014, almost half of the permit and amendment applications were processed in less than three months. The flow chart on the page 10 illustrate the permitting process. There were 101 requests for permits or amendments during the year.

Time to process	Applications
Less than 2 months	20
2 to 3 months	27
3 to 4 months	14
4 to 5 months	12
5 to 6 months	12
More than 6 months	16

¹⁵ Ibid.

¹⁶ 82-4-403, MCA.

¹⁷ 82-4-405, MCA.

The DEQ is required to hold a public hearing on an application if 30 percent of the property owners within a half mile of a proposed mine, or 10 property owners, whichever is greater, request the hearing. Since enactment of the law, two to four hearings are held a year.

Inspections and Enforcement

Opencut operations are inspected when the operator applies for a permit, an amendment, or release request. A complaint to the enforcement division also initiates an inspection.

In the fiscal years of 2012 and 2013, the enforcement division received 69 citizen complaints regarding opencut operations.¹⁸ Of those:

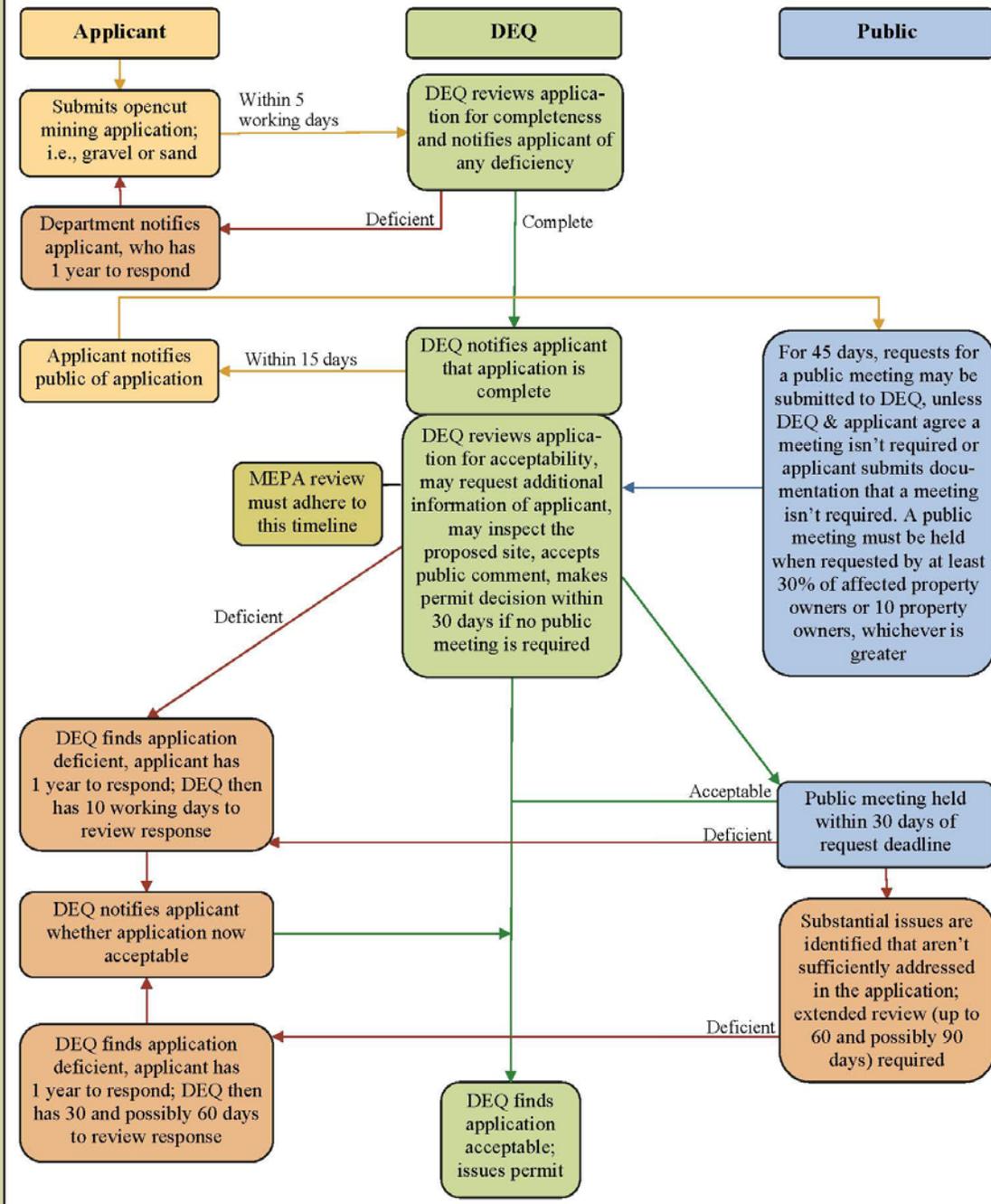
- Two were referred to the Opencut Program and they closed 18;
- Two were closed with not enough information and 13 were closed with no violation;
- Twenty-five were actively managed and closed and three remain active; and
- Six complaints became formal enforcement cases.

The enforcement division sent 12 warning letters and two violation letters during the reporting period. The letters were primarily sent regarding mining without a permit. Mining beyond the permitted boundary was also a common violation. At the end of the reporting period, 47 cases were closed, 16 are under order, seven were in litigation in either an administrative appeal or district court, and two cases were in development. A total of \$193,829 in administrative penalties and \$303,978 judicial civil penalties were collected during the reporting period. The money goes to the Environmental Restoration and Rehabilitation Account.

¹⁸ Environmental Enforcement and Compliance [report to EQC](#), 2014.

Opencut Mining Permitting Process*

Required for projects removing 10,000+ cubic yards of materials and overburden.



*Published by the Legislative Environmental Quality Council, 2012, as a reference. For legal purposes, always refer to statute and rule.

Fiscal Overview

The opencut program is funded from three sources. Operators pay an annual fee of 2.5 cents per cubic yard of materials mined during the year.¹⁹ The Opencut Program receives 85% of the fees collected. The remainder goes to the Department of Revenue for the Resource Indemnity and Groundwater Assessment Tax (RIGWAT) as required by 82-4-424, MCA.

Year	Fees Collected	RIGWAT Share	Opencut Share
2008	\$324,183.68	\$48,567.80	\$275,615.88
2009	\$257,755.71	\$34,094.05	\$223,661.66
2010	\$287,760.14	\$43,567.80	\$244,192.34
2011	\$330,775.00	\$49,616.25	\$281,158.75
2012	\$367,847.00	\$55,177.05	\$312,669.95
2013	\$329,379.64	\$49,406.95	\$279,972.69
2014	\$348,826.77	\$52,324.02	\$296,502.75

Another \$723,000 comes from the natural resources operations account.²⁰ And just more than \$93,000 is general fund money.

The opencut program has 12.63 FTE, including five environmental science specialists.

Audits

A Legislative [audit of the opencut program](#) in 2008 found numerous problems including:

- Permits not being issued in the timeframes required by law;
- Despite a backlog of permit applications, the permitting process was not formalized, some applications were processed out of turn, and that instead of processing applications DEQ employees were actually drafting application documents;
- Not all operators were paying the Resource Indemnity and Groundwater Assessment Tax (RIGWAT) that was a source of funding at the time for the program;
- Despite the controversial nature of some opencut mines, especially those near residential areas, neither the department nor the applicant were required to provide public notice.

A [follow-up review](#) in 2009 found that all the issues identified in the audit had been corrected or were being corrected.

¹⁹ Bentonite operations are not subject to the annual fee as per 82-4-238, MCA. Materials mined from state or federal opencut mines are not subject to the fee either. However, counties, cities, and towns pay the fee. The Opencut Program receives 85% of the fees collected. The remainder goes to the Department of Revenue for the Resource Indemnity and Groundwater Assessment Tax as required by 82-4-424, MCA.

²⁰ 15-38-301, MCA

The legislature in 2009 addressed many of the statutory issues, including the establishment of obtainable deadlines, a revision of the funding mechanism to the current annual fee structure, and the provision for public notice. The additional funding generated by the annual fee revenue was used to hire additional employees to address the backlog of applications and bond release requests as well as process new applications in the required time periods.²¹ Statutory revisions in 2013 refined the permitting and public notice provisions.²²

The department also implemented a number of changes at the time and is continuing to address issues related to audit findings, including:

- Eliminating a backlog of bond release requests. In 2009, the department used recently released aerial photos to evaluate reclamation operators claimed to have completed prior to the date of the photos.
- Establishment in 2010 of a stakeholder group to address issues of concern and evaluate proposed changes to rules. Invitees include opencut operators, representatives of state and local governments, and other interested parties.
- Revised electronic applications that rely on autocalculations and checkboxes in an effort to standardize responses, reduce errors, and allow for faster evaluation by the DEQ.
- Offering pre-application meetings to operators where DEQ personnel will identify issues in need of addressing in the application.

²¹ [House Bill No. 678](#), 2009

²² [Senate Bill No. 332](#), 2013