

# STATE OF NEVADA

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## Performance Audit

Department of Business and Industry  
Division of Industrial Relations

2018



Legislative Auditor  
Carson City, Nevada

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# Audit Highlights



## Division of Industrial Relations

### Department of Business and Industry

Highlights of performance audit report on the Division of Industrial Relations issued on May 2, 2018. Legislative Auditor report # LA18-19.

#### Background

The Division of Industrial Relations is part of the Nevada Department of Business and Industry. The mission of the Division is to promote the health and safety of Nevada employees and the general public by providing workplace safety consultation and training, conducting inspections of businesses to ensure proper procedures relating to health and safety are being followed, and for confirming that injured employees are properly cared for following an accident on the job.

The Division operates six sections: Mechanical Compliance, Mine Safety and Training, Workers' Compensation, Occupational Safety and Health Administration, Safety Consultation and Training, and Legal / Labor Statistics. The Division is primarily funded with appropriations, fees, and federal grants. The Division oversees four operating accounts and six special purpose budget accounts.

The Division has 215 full-time equivalent positions as of April 2017. Personnel are located in four offices throughout the State, in Carson City, Reno, Elko, and Henderson. The Administrator of the Division is located in Henderson.

#### Purpose of Audit

The purpose of this audit was to determine the adequacy of the Division's regulatory processes related to elevators, boilers, and mines. The scope of our audit focused on fiscal year 2017; although we reviewed information through October 2017 and from prior years based on data available in the Division's database.

#### Audit Recommendations

This audit report contains nine recommendations to improve regulatory oversight of elevators, boilers, and mines. These recommendations include developing processes and controls to ensure elevators and boilers have operating certificates and inspection violations are resolved. Additionally, two recommendations address mine safety by requiring better management information and procedures to ensure regulatory functions are performed.

The Division accepted the nine recommendations.

#### Recommendation Status

The Division's 60-day plan for corrective action is due on July 27, 2018. In addition, the six-month report on the status of audit recommendations is due on January 27, 2019.

#### Summary

The Division of Industrial Relations (Division) does not have adequate processes over regulatory activities for elevators and boilers. Specifically, about 5,500 elevators and boilers were operating without required certificates as of June 30, 2017. Operating certificates are issued after a thorough inspection process and verify the elevator or boiler is meeting standards that promote safety. Since operating certificates were not issued, sometimes for multiple inspection cycles, the Division did not collect an estimated \$1.4 million in fees over the course of several years. Operating certificates were not issued partly because code violations noted during inspections were not monitored or cleared. In certain instances, serious violations existed for years before follow-up occurred. In an effort to reduce the inspection backlog, the Division transferred certain regulatory duties to outside entities, but did not provide sufficient guidance or oversight over third-party inspections and related activities. Finally, the Division does not have adequate management information over mining regulatory activities to reduce the risk of mining accidents.

#### Key Findings

The Division does not take reasonable steps to ensure elevators and boilers have certificates to verify operating safety. A review of data from the Division's tracking system indicated as many as 4,360 elevators and 1,188 boilers were operating without a certificate as of June 30, 2017. Some of these objects operated for years without a valid operating certificate. Furthermore, another 90 objects constructed since 2005 never received a final inspection to certify installation was in accordance with established codes. Elevators and boilers operated without certificates because the Division relies entirely upon the owner to identify certificate expiration dates, schedule inspections, and fix code violations. (page 6)

Elevators and boilers were not issued operating certificates for one of three reasons: a routine inspection was not performed, violations were not cleared, or fees were not paid. Our review of 50 objects found nearly half of objects had not been inspected in the cyclical timeframe established by the Division. (page 7)

Our review of information in the Division's database showed at least 90 installations or modified elevators and boilers were not inspected prior to being placed into service, some dating back to 2005. Construction and modification certificates allow 1 year from the date of issuance for the work to be completed before the certificate expires. (page 8)

The Division is not ensuring code violations related to an elevator's and boiler's operating safety are fixed and cleared in a timely manner. Inspection violations are a clear warning these objects are not operating within normally accepted standards and may be unsafe. Yet, our review of 130 inspection violations found the Division is performing limited, if any, procedures to confirm violations are addressed. Unresolved violations also contributed to the Division's loss of certificate fee revenue since some violations must be cleared prior to a certificate being issued. (page 9)

The Division transferred inspection and certain other regulatory responsibilities to third-party agencies, but has not developed sufficient guidance or provided oversight of these activities. Responsibilities were transferred around July 2015 in an effort to reduce the backlog of inspections for elevators and boilers to ensure objects were operating within adopted standards. However, many of the oversight activities outlined in the regulation have not been implemented by the Division. (page 11)

The Division does not have adequate management information to confirm annual mine inspections are performed. Although the Division does have an inspection process, management information to monitor inspections is cumbersome and inefficient. Management reports from its database do not provide sufficient detail to readily identify whether required annual inspections are completed. (page 12)

The Division is not monitoring whether violations from mine inspections are resolved appropriately and timely. Management indicated the Division does not have a uniform process for identifying open violations with past-due deadlines. Three of 20 mine files showed no evidence of any corrective measures being taken by mine operators regarding violations. As a result, the Division cannot be sure violations are resolved and mineworkers are safe. (page 13)

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This report contains the findings, conclusions, and recommendations from our performance audit of the Department of Business and Industry, Division of Industrial Relations. This audit was conducted pursuant to the ongoing program of the Legislative Auditor as authorized by the Legislative Commission. The purpose of legislative audits is to improve state government by providing the Legislature, state officials, and Nevada citizens with independent and reliable information about the operations of state agencies, programs, activities, and functions.

This report includes nine recommendations to improve regulatory oversight of elevators, boilers, and mines. We are available to discuss these recommendations or any other items in the report with any legislative committees, individual legislators, or other state officials.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Rocky Cooper".

Rocky Cooper, CPA  
Legislative Auditor

April 12, 2018  
Carson City, Nevada

# Division of Industrial Relations

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# Introduction

## Background

The Division of Industrial Relations (Division) is part of the Nevada Department of Business and Industry. The mission of the Division is to promote the health and safety of Nevada employees and the general public by providing workplace safety consultation and training, conducting inspections of businesses to ensure proper procedures relating to health and safety are being followed, and for confirming that injured employees are properly cared for following an accident on the job.

The Division operates with six sections:

- Mechanical Compliance – Provides oversight to issue or deny operating permits for elevators, boilers, and pressure vessels based on inspections.
- Mine Safety and Training – Provides oversight to establish and determine mine operator compliance with state and federal regulations, assist mine operators in meeting compliance through development of training programs, and providing consultation and technical assistance.
- Workers' Compensation – Provides oversight of benefits for Nevada workers injured on the job.
- Occupational Safety and Health Administration – Provides enforcement of safety and health standards for all workers in Nevada.
- Safety Consultation and Training – Provides on-site consultation services designed to help employers recognize and control potential safety and health hazards at their workplaces, improve their safety and health programs, and assist in training employees.

- Legal / Labor Statistics – Compiles and publishes information related to injury and illness rates for certain industries and how injuries and illnesses are distributed among various demographics and occupations.

### Budget and Staffing

In fiscal year 2017, the Division was primarily funded with appropriations, fees, and federal grants. The Division oversees four operating accounts and six special purpose budget accounts. Exhibit 1 shows the Division’s revenues and expenditures related to the four operating accounts.

### Revenues and Expenditures – Operating Budget Accounts Fiscal Year 2017

Exhibit 1

Revenues	Industrial Relations	Enforcement – Industrial Safety	Safety Consultation and Training	Mine Safety and Training	Total
Beginning Cash	\$ 1,926,680	-	-	-	\$ 1,926,680
Appropriation – Workers’ Compensation Fund	8,237,360	9,171,963	2,355,496	1,224,686	20,989,505
Grants	-	1,317,956	910,661	362,844	2,591,461
Licenses and Fees	78,500	189,283	5,873	-	273,656
Inspection Fees	-	312,250	-	-	312,250
Miscellaneous	558	44,435	-	-	44,993
<b>Total Revenues</b>	<b>\$10,243,098</b>	<b>\$11,035,887</b>	<b>\$3,272,030</b>	<b>\$1,587,530</b>	<b>\$26,138,545</b>
<b>Expenditures</b>					
Personnel	\$ 4,888,570	\$ 7,456,859	\$2,422,195	\$1,144,502	\$15,912,126
Operating	2,946,024	1,651,138	560,047	217,124	5,374,333
Transfers	1,095,531	-	-	-	1,095,531
Assessments and Cost Allocations	46,135	56,512	18,570	7,620	128,837
Miscellaneous	71,519	49,816	98,172	8,512	228,019
<b>Total Expenditures</b>	<b>\$ 9,047,779</b>	<b>\$ 9,214,325</b>	<b>\$3,098,984</b>	<b>\$1,377,758</b>	<b>\$22,738,846</b>
Difference	\$ 1,195,319	\$ 1,821,562	\$ 173,046	\$ 209,772	\$ 3,399,699
Less: Reversions to Workers’ Compensation Fund		(1,821,562)	(173,046)	(209,772)	(2,204,380)
<b>Balance Forward to 2018</b>	<b>\$ (1,195,319)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$ (1,195,319)</b>

Source: State accounting system.

The Division’s primary source of funds is an assessment levied on all self-insured employers, associations of self-insured employers, and private carriers of workers’ compensation. These assessments and related refunds are recorded in one of six

special purpose budget accounts. These accounts track workers' compensation assessments and other fees, fines, and penalties. Revenues amounted to \$60 million in fiscal year 2017 with associated expenditures of \$37 million, mainly related to assessment refunds, transfers, and other claims related to injured workers.

The Division had 215 full-time equivalent positions as of April 2017. Personnel are located in four offices throughout the State, in Carson City, Reno, Elko, and Henderson. The Administrator of the Division is located in Henderson.

### **Mechanical Compliance Section**

The Mechanical Compliance Section is dedicated to promoting the safe operation of elevators, boilers, pressure vessels, and related equipment by identifying hazards and code violations. The Division states this is done through a comprehensive and thorough inspection and quality control process that promotes safety through a firm, yet fair application of code standards.

The frequency of required inspections is based on the type of equipment and varies from 3 months to 4 years. Inspections can be performed by an approved Nevada Authorized Inspection Agency (third-party inspector) or a Division safety specialist. Inspection deficiencies must be recorded and reported to the Mechanical Compliance Section and must be addressed and corrected by the owner. The Division indicates that failure to do so may be dangerous and could result in fines.

Regulated objects consist of elevators, boilers, and pressure vessels.

- Elevators include an elevator, dumbwaiter, escalator, moving walk, platform lift, and all the machinery and equipment necessary for the operation of the object.
- Boilers are used for hot water supply, high-pressure sterilization, power processes, steam heating, and pool hot water supply. Boilers are described as a closed vessel in which water is heated, steam is generated, steam is superheated, or any combination thereof, under pressure

or vacuum, for use external to the boiler by the direct application of heat.

- Pressure vessels are used for cooling supply, filtering, heat exchange, heating, hot water supply, steam process, and storage. For these vessels, pressure is obtained from an external source or by the application of heat from a direct or indirect source.

For regulatory purposes, the Division combines boilers and pressure vessels into one category. Throughout this report, we combine these objects and refer to them as boilers. Exhibit 2 shows the number of elevators, boilers, and pressure vessels as of September 2017.

**Elevators, Boilers, and Pressure Vessels  
As of September 2017**

**Exhibit 2**

<b>Elevators</b>	<b>Residential or Exempt<sup>1</sup></b>	<b>Under Construction</b>	<b>Active Objects Subject to Regulation</b>	<b>Total Objects</b>
North	292	24	2,371	2,687
South	595	74	9,002	9,671
<b>Totals</b>	<b>887</b>	<b>98</b>	<b>11,373</b>	<b>12,358</b>

  

<b>Boilers and Pressure Vessels</b>				
North	170	168	5,477	5,815
South	438	324	8,726	9,488
<b>Totals</b>	<b>608</b>	<b>492</b>	<b>14,203</b>	<b>15,303</b>

Source: Division database as of September 2017.

<sup>1</sup> NAC 455C.516 sets forth exemptions from annual inspection requirements for certain elevators.

**Mine Safety and Training**

The Mine Safety and Training section was created by Legislative Act in 1909 to establish a safe work place for Nevada miners. This section's mission is to establish and determine mine operator compliance with state and federal regulations. The section is also responsible for assisting mine operators in meeting compliance through development of training programs and by providing consultation and technical assistance.



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The Division is required by NRS 512.170 to visit each mining county in the State and thoroughly inspect and investigate all mines therein. Inspections are to determine:

- Compliance with health and safety standards.
- Whether an imminent danger exists at the mine.
- The cause or causes of accidents, injuries, or loss of life occurring at the mine.
- If dangerous conditions or practices exist related to the condition and use of equipment and machinery.
- If any other information needs to be obtained from the mine operator.

## **Scope and Objective**

The scope of our audit focused on activities for fiscal year 2017; although we also reviewed information through October 2017 and from prior years based on data available in the Division's database. Our audit objective was to:

- Determine the adequacy of the Division's regulatory processes related to elevators, boilers, and mines.

This audit is part of the ongoing program of the Legislative Auditor as authorized by the Legislative Commission, and was made pursuant to the provisions of NRS 218G.010 to 218G.350. The Legislative Auditor conducts audits as part of the Legislature's oversight responsibility for public programs. The purpose of legislative audits is to improve state government by providing the Legislature, state officials, and Nevada citizens with independent and reliable information about the operations of state agencies, programs, activities, and functions.

# Safety Enforcement Process Needs Significant Improvement

The Division of Industrial Relations (Division) does not have adequate processes over regulatory activities for elevators and boilers. Specifically, about 5,500 elevators and boilers were operating without required certificates as of June 30, 2017. Operating certificates are issued after a thorough inspection process and verify the elevator or boiler (object) is meeting safety standards. Since operating certificates were not issued, sometimes for multiple inspection cycles, the Division did not collect an estimated \$1.4 million in fees over the course of several years. Operating certificates were not issued partly because code violations noted during inspections were not monitored or cleared. In certain instances, serious violations existed for years before follow-up occurred. In an effort to reduce the inspection backlog, the Division transferred certain regulatory duties to outside entities, but did not provide sufficient guidance or oversight over third-party inspections and related activities. Finally, the Division does not have adequate management information over mining regulatory activities to reduce the risk of mining accidents.

## **Elevators and Boilers Operate Without Certificates**

The Division does not take reasonable steps to ensure elevators and boilers have certificates to verify operating safety. A review of data from the Division's tracking system indicated as many as 4,360 elevators and 1,188 boilers were operating without a certificate as of June 30, 2017. Some of these objects operated for years without a valid operating certificate. Furthermore, another 90 objects constructed since 2005 never received a final inspection to certify installation was in accordance with established codes. Elevators and boilers operated without certificates because the Division relies entirely upon the owner to

identify certificate expiration dates, schedule inspections, and fix code violations.

Elevators and boilers were not issued operating certificates for one of three reasons: a routine inspection was not performed, violations were not cleared, or fees were not paid. Our review of 50 objects found nearly half had not been inspected in the cyclical timeframe established by the Division. Exhibit 3 shows the results of our sample of 50 objects without certificates as of June 30, 2017.

### Objects Without Operating Certificates Sample Results

### Exhibit 3

Object Type	Reason for No Certificate			Totals	Average Time Operated Without a Certificate
	No Inspection	Uncleared Violations	Fees Not Paid		
Elevator	9	8	8	25	17 months
Boiler	19	2	4	25	11 months
<b>Totals</b>	<b>28</b>	<b>10</b>	<b>12</b>	<b>50</b>	

Source: Audit testing results from Division records and database.

Statutes and regulations require owners of objects to obtain an operating certificate, including a safety inspection, in order to operate an elevator or a boiler. Regulations state that an elevator for which a certificate has not been issued must not be operated.

While objects tested had varying renewal periods, from 6 months to 4 years, no mechanism existed at the Division to identify those with expired, or soon to be expired certificates. Some objects in our sample did not have certificates for multiple inspection cycles. Of the 50 test items, 19 (38%) had multiple inspection years where certificates and related fees went unissued and unassessed.

We estimate the Division did not collect as much as \$1.4 million in fees because operating certificates were not renewed timely. Our estimate was based on the number of elevators and boilers from our sample that did not have certificates for one or more years. The exception rate and related fees were used to estimate the total fees uncollected using the population of objects without

certificates of about 5,500. These fees ranged from \$20 for boilers to \$200 for elevators.

The Division places a lot of the responsibility for object regulatory compliance on owners, but does not routinely communicate essential information such as requirements, due dates, or code violations needing attention. Additionally, the Division did not have a follow-up process to ensure regulatory functions were performed. Finally, even though the Division has the authority to compel compliance through fines or other methods, they have not established a graduated and equitable system of sanctions to help ensure elevator and boiler safety.

**New Installations and Modifications Not Always Inspected**

Our review of information in the Division’s database showed at least 90 installations or modified elevators and boilers were not inspected prior to being placed into service, some dating back to calendar year 2005. Construction and modification certificates allow 1 year from the date of issuance for the work to be completed before the certificate expires. Exhibit 4 shows the number of objects in the database as of June 30, 2017, with no initial or subsequent inspection.

**Elevators and Boilers Constructed or Modified Without Inspections As of June 30, 2017** **Exhibit 4**

Year	Elevators	Boilers	Totals
2005	2	-	2
2006	4	-	4
2007	8	-	8
2008	17	-	17
2009	11	-	11
2014	6	6	12
2015	5	7	12
2016	21	3	24
<b>Totals</b>	<b>74</b>	<b>16</b>	<b>90</b>

Source: Division database and discussions with personnel.  
 Note: No exceptions were identified in 2010-2013 and 2017.

Regulations require inspections upon installation or modification of an elevator or boiler and do not allow for operation of the object

under a construction certificate. These policies exist to protect the public from substandard materials and workmanship.

Nevertheless, Division personnel confirmed that many, if not all of these objects are most likely currently operating.

Typically, Division personnel perform inspections related to modified or newly constructed elevators and boilers. However, the Division relied entirely on owners to notify the Division when work on an object was complete. Also, the Division did not monitor, review, or follow up on construction and modification certificates issued. Doing so would have identified objects needing inspections and operating certificates or provided clarification that the object was not installed as anticipated.

### **Inspection Violations Not Always Cleared**

The Division is not ensuring code violations related to an elevator's or boiler's operating safety are fixed and cleared in a timely manner. Inspection violations are a clear warning these objects are not operating within normally accepted standards and may be unsafe. Yet, our review of 130 inspection violations found the Division is performing limited, if any, procedures to confirm violations are addressed. Unresolved violations also contributed to the Division's loss of certificate fee revenue since some violations must be cleared prior to a certificate being issued.

Inspections are conducted to determine whether elevators and boilers are operating in compliance with nationally accepted standards. Violations indicate an object is not in compliance with one or more standards and can prevent an operating certificate from being issued; but, not all violations are serious enough to prevent an object from operating safely. Violations found by third-party inspectors are provided to the Division through reports required to be submitted within 10 days of the inspection.

We reviewed Division activities over violations to determine if owners were notified, if the Division or third-party inspectors established deadlines for correction, and if the Division performed any follow-up to confirm an object's operating worthiness. Exhibit 5 shows the results of our review of 130 violations.

**Results of Follow-up Performed by the Division on Closed and Open Violations**

**Exhibit 5**

<b>Closed Violations</b>	<b>Timeframe Established to Resolve Violation</b>	<b>Follow-up Done Within Established Timeframe</b>	<b>Notice of Violation Issued by Division to Owner<sup>1</sup></b>	<b>Average Time Violation Outstanding</b>
Elevator	100%	5%	0%	349 days
Boiler	37%	45%	25%	71 days
<b>Open Violations</b>				
Elevator	100%	0%	0%	246 days <sup>2</sup>
Boiler	72%	0%	88%	240 days <sup>2</sup>

Source: Division records and database.

<sup>1</sup> The Division is required to issue notices to owners of inspection violations and the timeframe provided to fix noted items. Third-party inspectors may provide this information when an inspection is performed.

<sup>2</sup> Open violations were calculated as outstanding to June 30, 2017.

Timeframes to resolve violations, when determined, usually provide owners with 30 days to have the necessary work performed. Although third-party inspectors may provide owners with inspection results and violations, the nature of the violation and the period within which the owner must correct the violation is required to be communicated by the Division to the object owner. Statutes and regulations require both state and third-party inspectors to provide a reasonable timeframe to clear the violation. Additionally, regulations require follow-up no later than 5 business days after the deadline to determine whether the violation has been resolved. Results of follow-up activity should be reported to the Division within 5 business days.

The Division has not established a process to ensure inspectors from the State or third-party agencies follow up on violations. In many cases, we found the Division cleared prior year violations based on a subsequent year inspection if the same violation was not stated on the current year report. This method of clearing violations is not timely and does not adequately document that violations have been thoroughly addressed. Furthermore, violations are often cleared by Division staff without technical knowledge. In addition, violations are cleared without review from personnel with the expertise to understand the seriousness of the matter identified in the violation.

## **Oversight of Third-party Inspectors Is Lacking**

Best practices for regulatory industries recommend agencies follow up as needed to determine whether violations have been corrected or whether additional enforcement is needed. These standards also recommend tracking enforcement actions to ensure violations are addressed appropriately and having supervisors review actions taken so that work is consistent and based on clear and sufficient evidence.

The Division transferred inspection and certain other regulatory responsibilities to third-party agencies, but has not developed sufficient guidance or provided oversight of these activities. Responsibilities were transferred beginning in July 2015 in an effort to reduce the backlog of inspections for elevators and boilers to ensure objects were operating within adopted standards. However, many of the oversight activities outlined in the regulation have not been implemented by the Division.

Regulations revised in 2015 provide for an oversight structure related to third-party agencies and the Division. For instance, third-party agencies are to submit inspection reports to the Division within 10 days, and communicate to the Mechanical Compliance Section when certain dangerous conditions exist. Additionally, these agencies need to follow up on violations within 5 business days after the time provided to resolve the issue. Finally, regulations indicate the Division is to perform oversight of third-party agencies to ensure quality in the inspection process.

We found the Division relies heavily on third-party agencies to perform activities adequately. Also, there are no guidelines and limited supervision by the Division is performed. Examples of activities with inadequate guidelines and supervision include:

- Determining what conditions qualify as certificate blocking violations.
- Determining what conditions would be serious enough to define an object as dangerous.
- Identifying and removing an object from service considered to be too dangerous to operate. Division personnel

indicated an object cannot be removed from service due to dangerous conditions even though regulations allow for this.

- Submitting reports within 10 days after an inspection.
- Performing and communicating follow-up on inspection violations.

Additionally, the Division was not performing quality assurance activities such as reviewing checklists, activity logs, operations manuals, or other activities to verify inspections were adequate and consistent. The Division indicates it is making progress in this area and has instituted quality assurance reviews.

Without adequate supervision, regulatory duties may not be performed as needed and public safety may be compromised. As noted earlier in our report, violations are not always resolved in a timely manner. This could partially be due to a lack of guidance detailing the expectations between the Division and third-party agencies, as well as other factors.

### **Management Information Not Adequate for Mine Safety**

The Division does not have adequate management information to confirm regulatory activities for mine safety are performed. Although the Division does have an inspection process, management information to monitor inspections is cumbersome and inefficient. Management reports from its database do not provide sufficient detail to readily identify whether required annual inspections are completed. Additionally, the Division has not established a monitoring process for violations to make sure safety hazards are resolved.

NRS 512.170 requires the Division to inspect all mines to determine:

- Compliance with health and safety regulations.
- Whether an imminent danger exists.



- If there are dangerous conditions or practices in the condition or manner of use of equipment, machinery, or apparatus.

Although the Division reported performing 400 site visits during fiscal year 2017, details were not sufficient to readily determine whether thorough annual inspections were conducted for each mine. In addition to annual inspections, the reported visits include oversight of construction activities and investigation of accidents. In the Division's report, we found 173 mine facilities received some form of site visit during that period. Division management also provided a report indicating 226 active mines subject to inspection. However, our review of the report only identified 208 active mines. While our testing indicated all 10 sampled mines received the required annual inspections, 2 were performed about 60 days late. Without adequate management information to monitor inspection activities, the Division cannot positively determine whether all mine sites receive timely annual inspections.

### **Monitoring Needed for Violations**

The Division is not monitoring whether violations from mine inspections are resolved appropriately and timely. Management indicated the Division does not have a uniform process for identifying open violations with past-due deadlines. Three of 20 mine files showed no evidence of any corrective measures being taken by mine operations regarding violations. As a result, the Division cannot be sure violations are resolved and mineworkers are safe.

Statutes require mine operators be notified of violations and related deadlines for corrective action. Additionally, Division policy allows for a written order for failure to comply if corrective action is not taken.

The Division relies on mine operators to resolve violations and provide attestation to the Division that issues have been resolved. However, an attestation by the mine operator may not be sufficient to ensure necessary corrective action has been taken. Some oversight by the Division of corrective action taken by mine

operators is necessary to ensure violations are appropriately addressed. As a result of our discussions, the Division developed a memorandum requiring inspectors verify and document corrective measures taken are adequate; but, issues regarding monitoring and tracking of violations remain.

### **Recommendations**

1. Develop policies, procedures, and controls over tracking, monitoring, and issuing operating certificates for elevators and boilers.
2. Develop policies, procedures, and controls over tracking, monitoring, and clearing inspection violations. Ensure violations are cleared based on sufficient documentation and by personnel trained in elevator and boiler safety.
3. Establish a graduated and equitable system of sanctions to help ensure elevator and boiler safety compliance.
4. Monitor the construction and modification of elevators and boilers and perform inspections as required.
5. Notify elevator and boiler owners of violations, deadlines, and related enforcement actions to be applied if violations remain unresolved.
6. Develop detailed guidelines regarding third-party inspection regulatory activities.
7. Institute a quality assurance program as outlined in regulations regarding third-party inspector activity. Develop policies and procedures over the program to ensure regulatory functions are performed adequately and the public is safeguarded.
8. Create a database that efficiently organizes and tracks the Division's regulatory activities over mines.
9. Establish policies, procedures, and controls to ensure mines are inspected when required and inspection violations are cleared timely.

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# Appendix A

## Audit Methodology

To gain an understanding of the Division, we interviewed staff and reviewed statutes, regulations, and policies and procedures significant to the Division's operations. We also reviewed financial information, budgets, legislative committee minutes, prior audits, and other information describing the Division's operations. Finally, we documented and assessed internal controls over the certificate process for elevator and boiler objects, and the inspection and violation abatement process for elevators, boilers, and mines.

To assess the reliability of the elevator and boiler database, we randomly selected 200 object records of the 12,358 elevators and 15,303 boilers actively operating as of September 2017. We compared certain regulatory actions and dates from the database to information in Division files. We determined the database to be reliable for our intended use.

To determine the Division's process for ensuring objects meet regulatory requirements, we held discussions with management about the certificate issuance process for both elevator and boiler objects. Next, we determined the population of elevators and boilers operating without a permit. We randomly selected 25 elevators and 25 boilers of the 4,360 and 1,188 objects, respectively, without certificates at June 30, 2017. We reviewed the information in Division files and the database to determine whether the object was active, if any violations were noted, whether an inspection was conducted, the cause for the non-certificate status, whether penalties were issued, and if any accidents were noted. Lastly, for each object we determined the number of inspection cycles without an operating certificate and calculated the total uncollected revenue.

We projected the uncollected revenue from our sample to the population of objects without certificates. For our 50 sample

items, we reviewed the certificates issued on the elevator or boiler back to 2015 and identified entire cycles where objects operated without certificates. We calculated the amount of fees that were not collected related to these time periods. We determined the percentage of elevators and boilers in our sample that resulted in uncollected revenue and multiplied that across the population of objects without certificates. Finally, we determined the average revenue loss for elevators and boilers separately and multiplied that amount to the error population calculated previously.

To evaluate whether the Division followed up to make sure code violations found during object inspections were cleared, we obtained a detailed report of all open and closed violations as of June 30, 2017. Next, we randomly selected 50 of 6,586 open and 80 of 17,602 closed violations. We reviewed the information in Division files and the database, and determined if timeframes for owners to clear violations were set and communicated to owners. Next, we determined if the Division performed any follow up on either open or closed violations, and how long violations remained outstanding. We discussed these matters and whether sanctions are imposed with management.

Since the Division has transferred inspection and certain other duties to third-party agencies, we reviewed regulations regarding these activities. We inquired about Division procedures and the existence of guidance and related oversight activities with management.

To evaluate the adequacy of the information available to monitor mines in the state, including inspections and abatements, we reviewed available management information. We discussed data limitations with management. Finally, we reviewed 30 mine files to confirm our understanding of the information available and the Division's processes.

For our tests over object operating certificates and inspection violations, we used non-statistical audit sampling, which was the most appropriate and cost-effective method for concluding on our audit objective. Based on our professional judgment, review of authoritative sampling guidance, and careful consideration of

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underlying concepts, we believe that non-statistical samples provided sufficient, appropriate audit evidence to support the conclusions in our report. Our samples included randomly selected items.

Our audit work was conducted from May 2017 to February 2018. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

In accordance with NRS 218G.230, we furnished a copy of our preliminary report to the Administrator of the Division. On March 30, 2018, we met with agency officials to discuss the results of the audit and requested a written response to the preliminary report. That response is contained in Appendix B, which begins on page 18.

Contributors to this report included:

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# Appendix B

## Response From Division of Industrial Relations

**BRIAN SANDOVAL**  
*Governor*

**CJ MANTHE**  
*Director*

STATE OF NEVADA



**JOSEPH "JD" DECKER**  
*Administrator*

DEPARTMENT OF BUSINESS AND INDUSTRY  
**DIVISION OF INDUSTRIAL RELATIONS**  
1301 N. Green Valley Pkwy, Suite 200  
Henderson, Nevada 89074

**April 12, 2018**

**LCB Audit Response**  
**Division of Industrial Relations**  
**Department of Business & Industry**

### **Introduction**

In 2016, Administrator J.D. Decker was appointed to the Division of Industrial Relations specifically to identify problems in processes and outcomes within the Division sections, and to develop and apply changes and solutions. To that end, Deputy Administrator Ray Fierro was later hired to specifically assist in reorganizing and improving the Mechanical Compliance Section. Both the Administrator and Deputy Administrator were able to work very closely with the Audit team to formally identify many of the issues that the Division had been addressing prior to the audit. During 2017, a lot of time and energy went into improving the Inspection Program and building better relationships with constituents and interested parties. These improvements continue into 2018 with good results. The Division welcomes the audit findings as indicative of the same problems in process and procedure that the Division has been attempting to identify and correct. We believe that the audit greatly assisted the Division in refining the section problems so that we can continue to pursue process improvement.

### **Response**

The Nevada Administrative Code (NAC) 455C was updated in 2015, resulting in periodic elevator inspection work being done by private Authorized Inspection Agencies (AIA/Special Inspectors) rather than state inspectors (Jurisdictional Inspectors).

The transition lacked proper preparation and planning and resulted in the section being reactionary to problems as they occurred. Fiscal review of the impact of the problems encountered places the revenue yet to be recovered more accurately at \$770,000 when measured by number of unpermitted items as of March 2018. Some of the problems encountered include:

- 1) A shortage of elevator mechanics; Inspection tests, as required by the NAC, must be witnessed by both a mechanic and a Special Inspector, who must both be present at the time of the test. This can often require multiple trips and significant coordination

between inspection companies and service companies. In the absence of an adequate marketplace of both types of contractors, there can be delays in completing contracted paperwork for conveyance owners.

- 2) During the beginning of the 2015 transition there were only a few Special Inspectors available to cover a large amount of periodic inspection work that was no longer being performed by Jurisdictional Inspectors.
- 3) Inspection paperwork submitted by Special Inspectors to the jurisdiction, when incorrect, can take up a significant amount of time for the section to follow up on, and enforcement tools were not utilized by the section. The section lacked a formal procedure for staff to use to keep up with these processes.
- 4) Until recently, the section lacked effective policies and procedures to address aspects of the Inspection Program and had inadequate working relationships with interested parties (Special Inspectors/AIA's, Elevator Service Companies, and the Owners of the Elevators). This resulted in the section developing a significant backlog of work and many unpermitted conveyances.
- 5) The section staff was inadequately trained and unable to effectively utilize their records management system to calendar deadlines and keep track of unpermitted items.

**1. Develop policies, procedures, and controls over tracking, monitoring, and issuing operating certificates for elevators and boilers**

The Mechanical Compliance Section is currently in the process of creating new Standard Operating Procedures for key functions within the section. This includes new processes for categorizing permitting, abatement of violations, and issuance of certificates. Back office functions have been standardized to ensure the timely processing of section work, as well as reducing backlogged and unpermitted items. Quick reference guides have been produced to ensure that work is processed consistently and timely. The section has instituted a process January, 2018 for notifying elevator owner 60 days in advance of the expiration of their items and collecting section fees prior to initiating the renewal process to streamline the issuance of certificates. This has allowed the Division to greatly reduce existing backlog and improve compliance efforts from conveyance owners.

**2. Develop policies, procedures, and controls over tracking, monitoring, and clearing inspection violations. Ensure violations are cleared based on sufficient documentation and by personnel trained in elevator and boiler safety**

Inspection Violations are currently tracked in Jurisdiction Online with thirty-two data points per violation including such information as Case Number, Location, Specific Violation, Date, and Inspector. Additionally, as per a new section policy established in March, 2018, a report is run on the first of each month detailing all open violations older than thirty days, for supervisory review. A TIN has been proposed in the Division's 2019 budget to enhance the Jurisdiction Online system to more effectively calendar due dates related to certificate expirations, abatement dates, and inspection dates. This budget will also include the addition of an Administrative Assistant 2 to monitor various expiration dates and provide inspectors and supervisors with calendaring data.

**3. Establish a graduated and equitable system of sanctions to help ensure elevator and boiler safety compliance**

The section issued a process map in May, 2017 establishing a system of formal warnings and graduated sanctions for non-permitted conveyances. This policy is currently being expanded to address boiler compliance, and has been implemented as a tool to ensure consistency in the application of disciplinary action by section staff.

**4. Monitor the construction and modification of elevators and boilers and perform inspections as required**

Elevators and boilers with permits for construction or alteration are currently tracked in Jurisdiction Online. The section has recently begun supervisor tracking of all new-construction applications to ensure that the section is taking appropriate action and timely action, and that any deviations are caught by supervisors. This reporting function was established since the audit after significant coordination with the software vendor over the past year to develop section-specific capabilities that had not been previously utilized.

**5. Notify elevator and boiler owners of violations, deadlines, and related enforcement actions to be applied if violations remain unresolved**

In January 2018, the section began a process of notifying owners who are operating elevators and boilers without a current permit of their violations, pertinent deadlines, and possible enforcement actions in an effort improve the likelihood of renewals and abatements occurring within NAC timeframes. Thus far, letters have been sent to ninety properties accounting for over one thousand objects detailing which objects are currently operating without a permit. As per the policy timeframe, second notices have been sent to fifteen properties as of March 28, 2018. As a result, thirty properties have scheduled new inspections in order to achieve compliance, one major casino property has brought all of their items into compliance, and five other properties have either applied for extensions or developed plans to pursue compliance. The section believes that this change in process will significantly impact the number of compliant items over time.

**6. Develop detailed guidelines regarding third-party inspection regulatory activities**

Since early 2017, the section has undergone a review of forms. The section has revised forms, solicited feedback, established guidelines, and instituted an audit program to assist third-party inspectors in keeping up with marketplace demands while meeting regulatory requirements. The section has issued documents clarifying permitting, alterations, violation categories, and the issuance of permits consistently over the past 12 months.

**7. Institute a quality assurance program as outlined in regulations regarding third-party inspector activity. Develop policies and procedures over the program to ensure regulatory functions are performed adequately and the public is safeguarded**

A quality assurance program regarding third party inspector activity has been established in 2018. Previously staff spent significant effort reviewing and correcting 100% of the Special Inspector reports received by the section. After we completed a 2018 certification audit on all third party inspection agencies in the state, we established a formal sampling quota for quality-control checks on Special Inspector inspection- report submissions. These audit checks include both administrative and discretionary physical inspections of a sampling of the work being performed by the third party inspection agencies. This program was piloted in the northern section and has greatly enhanced the effectiveness of the section's resources, freeing up staff time for other section activities. The southern section has now implemented the audit program as well.



**8. Create a database that efficiently organizes and tracks the Division's regulatory activities over mines**

The Mine Safety and Training Section tracks approximately 210 mining operations and 1000 independent contract operations. Since the audit, the section has developed a spreadsheet to enhance their records management and have categorized their data by Mine District to more effectively target the management of their data. The new spreadsheet identifies the mine, operator or contractor by name, product, MSHA ID Number, Inspection Due Date, Inspection Completion Date, Product and Mine Status. The section is now able to quickly and accurately separate mines from contractors and track inspection due dates and completion dates along with abatement dates established after violations are issued. The inspection due dates are automatically flagged in yellow 90 days before the inspection is due and red immediately after the due date, and is reviewed weekly by supervisors and management.

**9. Establish policies, procedures, and controls to ensure mines are inspected when required and inspection violations are cleared timely**

Since the audit, the section has also updated its Policies & Procedures manual to require inspectors to enter abatement due-dates into a common Outlook calendar. The Safety Manager conducts a weekly review of open Orders/Notices and oversees the District Inspectors' completion of any open abated violations.

## Division of Industrial Relations' Response to Audit Recommendations

<u>Recommendations</u>	<u>Accepted</u>	<u>Rejected</u>
1. Develop policies, procedures, and controls over tracking, monitoring, and issuing operating certificates for elevators and boilers.....	<u>    X    </u>	<u>          </u>
2. Develop policies, procedures, and controls over tracking, monitoring, and clearing inspection violations. Ensure violations are cleared based on sufficient documentation and by personnel trained in elevator and boiler safety.....	<u>    X    </u>	<u>          </u>
3. Establish a graduated and equitable system of sanctions to help ensure elevator and boiler safety compliance .....	<u>    X    </u>	<u>          </u>
4. Monitor the construction and modification of elevators and boilers and perform inspections as required .....	<u>    X    </u>	<u>          </u>
5. Notify elevator and boiler owners of violations, deadlines, and related enforcement actions to be applied if violations remain unresolved.....	<u>    X    </u>	<u>          </u>
6. Develop detailed guidelines regarding third-party inspection regulatory activities.....	<u>    X    </u>	<u>          </u>
7. Institute a quality assurance program as outlined in regulations regarding third-party inspector activity. Develop policies and procedures over the program to ensure regulatory functions are performed adequately and the public is safeguarded.....	<u>    X    </u>	<u>          </u>
8. Create a database that efficiently organizes and tracks the Division's regulatory activities over mines.....	<u>    X    </u>	<u>          </u>
9. Establish policies, procedures, and controls to ensure mines are inspected when required and inspection violations are cleared timely .....	<u>    X    </u>	<u>          </u>
TOTALS	<u>    9    </u>	<u>          </u>