





Oregon Pacific-Cascade

Local Union #659

Joint Safety Committee Oregon Pacific-Cascade Chapter, NECA IBEW Local 659 Wednesday January 17, 2023 Meeting MINUTES

Rollcall: meeting called to order-In Person, Video-Conferencing available Approval of Previous Meeting Minutes

Communications

EEW Program Review Subcontractors on premises- Liability, WC New Business: Monthly Safety Training and Information Packets (distributed) Overconfidence-Risk Conditioning Zero Accidents-Is it achievable? Strategies-Culture, Safety as a \$ savings **OSHA Injury/Incidents** (July-Dec) 280- Shock- hand, troubleshooting a light fixture, Recordable 280- Struck-by, cut, hand using bandsaw, Recordable 280- Strain, chest, pulling cable, MD 280- Struck-By, head, wearing hardhat, MD 280- Caught-In, hand, Tugger, MD 659- Struck-By, Head, Dig bar, Recordable 659- Struck-by, Shoulder, Temp power pole, First Aid 659- Strain, abdomen, pulling wire, MD 659- Strain, Knee, kneeling, MD 280- Strain, Back, Strain, Apprentice, LT 280- Struck-By, Cut, Leg, using a box cutter, Recordable 659- Struck-By, Arc-Flash, Arm, MD 280- Fall, Elbow, Fall through plywood cover, MD

Class Schedule- Posted online

Next Meeting – January 17, 2023

Adjournment

Elias Campbell- NECA/GEW Senior Safety Consultant January 17, 2023







Oregon Pacific-Cascade

Local Union #659

Joint Safety Committee Oregon Pacific-Cascade Chapter, NECA IBEW Local 659 Tuesday February 21, 2023 Meeting AGENDA

Rollcall: meeting called to order In-person and videoconferencing **Approval of Previous Meeting Minutes**

- 1.0 <u>Communications</u>
 - 1.1 ITA Submission (3/2/23)
 - 1.2 2023 Innovative Safety Committee application
 - 1.3 Safety Break Oregon- May 10, 2023
- 2.0 <u>New Business</u>: Monthly Safety Training and Information Packets (distributed)
 - 2.1 OSHA 2023 Outlook- enforcement, additional inspectors
 - 2.2 NFPA 70E- 'qualified person' vs 1910.333
 - 2.3 OSHA IBI citations changes- what does it mean?

3.0 OSHA Injury/Incidents (Jan-Jun)

Recordable

- 3.1 280 Pulling action, muscle strain, MD
- 3.2 280 Kneeling, muscles strain, Knee, MD

First Aid/Near-miss

- 3.3 Cut finger, cutting strips of Velcro, no gloves
- 3.4 Cut arm, cutting cable tray, no long sleeves
- 3.5 Wrist twist, drilling concrete with rebar, body placement

4.0 <u>Class Schedule-</u> posted online

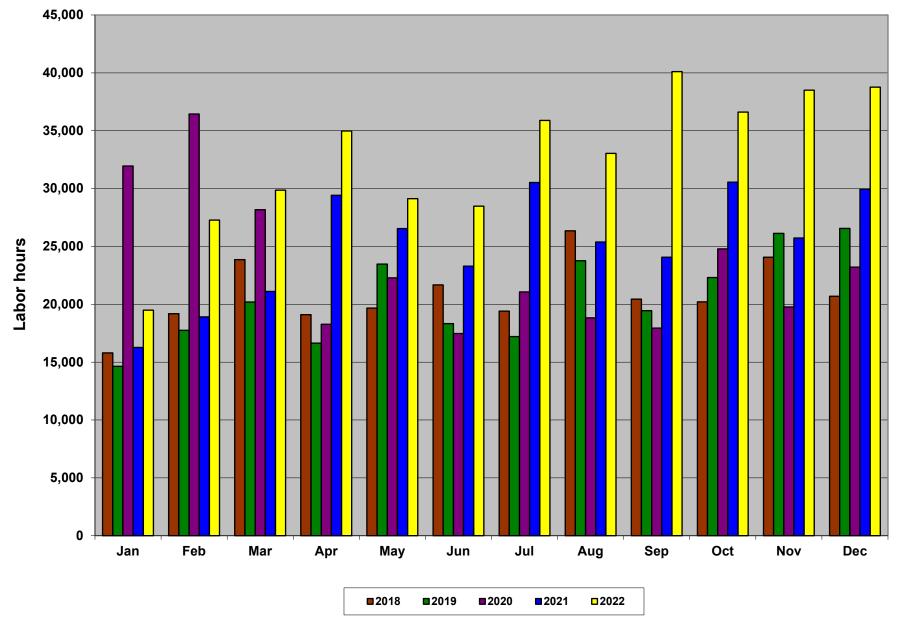
<u>All NECA Contractors</u> are reminded that work related accidents and incidents should be

reported via the Accident/ Incident report to the NECA office for consideration by the committee. If you need a copy of the report, contact the Chapter office.

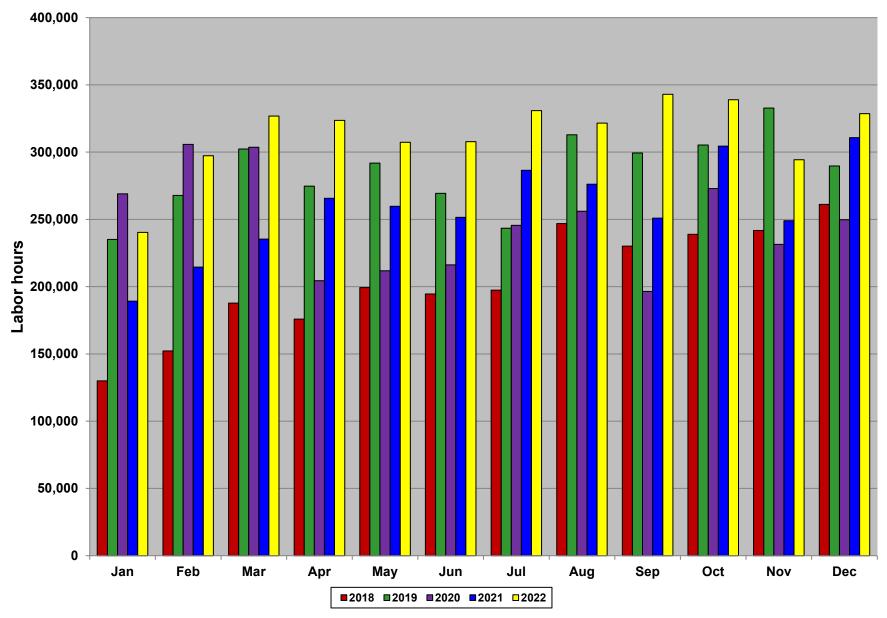
IMPORTANT REMINDER: The variance granted to NECA/IBEW by OR-OSHA requires participation by both Labor and Management Representatives at the Joint Innovative Safety Committee. For the Committee to be viable and provide assistance to Contractors and IBEW Members we need to have consistent attendance of all committee members.

Next Meeting: March 21, 2023

IBEW LABOR HOUR RECAP, LAST 5 YEARS NECA CONTRACTORS - LOCAL 659



IBEW LABOR HOUR RECAP, LAST 5 YEARS ALL SIGNATORIES



2022 LABOR HOURS RECAP

		Annual		Average												
Local#	Contract Type	Total		Hrs/Mo	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Inside	, ,	12	140,533	120,071	143,818	155,354	143,742	143,340	138,854	144,406	143,672	148,415	150,798	118,104	135,822
	Inside Appr.	532,125	12	44,344	32,600	38,674	45,755	43,832	44,534	46,869	47,369	50,097	50,673	47,813	38,560	45,349
	MAI	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0
	Material		12	14,510	11,541	13,773	14,472	13,801	15,080	14,088	15,369	14,746	15,998	18,317	12,751	14,185
	Residential		12	8,167	5,937	7,683	8,850	9,039	7,776	8,343	7,908	7,900	8,618	7,613	8,737	9,603
	Resi. Appr.		12	6,722	4,361	5,788	6,387	7,106	6,530	6,489	7,052	6,758	8,253	6,689	7,177	8,070
	S & C	234,683	12	19,557	13,122	17,012	19,668	20,267	17,261	18,997	22,149	20,510	21,905	20,792	19,951	23,049
	S & C Appr.		12		5,438	7,486	7,017	7,463	6,588	7,112	7,745	7,620	8,296	7,127	6,694	6,679
280	Support Tech/MOU		12		8,163	13,754	15,113	18,774	14,335	15,687	17,794	15,629	18,158	20,694	21,633	26,081
	TOTAL 280	3,097,072	##	258,089	201,233	247,988	272,616	264,024	255,444	256,439	269,792	266,932	280,316		233,607	268,838
	Total NECA				172,464	220,226	240,771	233,600	222,978	225,525	251,028	247,118			209,994	246,643
	% NECA				85.70%	88.81%	88.32%	88.48%	87.29%	87.94%	93.05%	92.58%	93.28%	92.39%	<mark>89.89%</mark>	91.74%
				-												
		Annual		Average												
Local#	Contract Type	Total		Hrs/Mo	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Inside		12	25,392	17,421	22,465	24,113	27,567	23,683	22,581	27,384	24,671	29,874	27,174	29,347	28,421
	Inside Appr.		12	12,931	8,904	11,196	12,043	13,406	12,199	12,345	14,723	13,306	15,462	13,973	14,235	13,383
	Material		12	968	536	718	619	1,000	871	709	1,162	1,062	1,376	1,477	879	1,208
	Residential		12	746	633	661	708	820	642	726	808	706	886	825	765	774
	Resi. Appr.		12	456	359	466	388	480	462	510	589	490	511	548	372	297
	S & C	11,382	12	949	581	903	1,404	980	867	717	1,051	870	1,020	666	929	1,394
659	S & C Appr.	1,854	12	155	177	219	458	162	163	56	74	0	0	158	31	356
	Total 659	499,155	84	41,596	28,611	36,628	39,733	44,415	38,887	37,644	45,791	41,105	49,129	44,821	46,558	45,833
	Total NECA				19,494	27,278	29,860	34,977	29,124	28,473	35,883	33,042	40,106	36,609	38,502	38,770
	% NECA				<mark>68%</mark>	74%	<mark>75%</mark>	<mark>79%</mark>	<mark>75%</mark>	<mark>76%</mark>	<mark>78%</mark>	80%	<mark>82%</mark>	<mark>82%</mark>	83%	<mark>85%</mark>
		A		A												
		Annual		Average	Let a	E.L							0	0.1		
Local#	Contract Type		10	Hrs/Mo	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Inside		12		6,804	8,251	9,411	9,839	8,412	8,658	9,436	8,525	8,672	8,999	8,743	8,717
	Inside Appr.		12 12	4,134	3,041	3,620	4,129	4,348	3,823	4,197	4,678	4,078	4,136	4,476	4,695	4,387
932	Residential	1,518		127	14 115	162	157	184	103	119	193	153	0 127	157	154	122
	Resi. Appr. S & C	1,410	12 12	118 602	497	161 478	153 648	194 573	158 462	151 609	189 711	162 617	653	0 621	0 627	0 723
	S & C Appr.	7,219 99	12			30	040	8	462	18	30	0	13	021	027	0
932	Total 932	99 164,321	12 72	8 13,693	0 10,471	30 12,702	14,498	⁸ 15,146	12,958	13,752	30 15,237	13,535	13 13,601	14,253	14,219	13,949
	Total NECA	104,321	12	13,093	8,823	10,973	12,747	13,055	10,886	11,821	13,031	13,535	11,729	12,352	14,219	11,932
	% NECA				84%	86%	88%	86%	84%	86%	86%	87%	86%	87%	83%	86%
	70 NECA				04 70	00%	0070	0070	04 70	0070	0070	0170	0070	0170	0370	0070
	Grand Total	3,760,548		313,379	240,315	297,318	326,847	323,585	307.289	307.835	330.820	321.572	343,046	338,917	294,384	328,620
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	Total NECA	3,323,509	12	276,959	200,781	258,477	283,378	281,632	262,988	265,819	299,942	291,978	313,319	307,499	260,351	297,345
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	% NECA	88%		88%	84%	87%	87%	87%	<mark>86%</mark>	<mark>86</mark> %	<mark>91%</mark>	<mark>91%</mark>	<mark>91%</mark>	<mark>91%</mark>	88%	90%

2022 LABOR HOURS RECAP NECA MEMBERS

		Annual		Average												
Local#	Contract Type	Total		Hrs/Mo	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
280	Inside	1,518,786	12	126,566	102,841	127,609	137,010	126,561	124,895	121,868	134,565	132,830	138,209	140,519	106,711	125,168
280	Inside Appr.	467,636	12	38,970	26,037	32,474	38,784	36,996	36,454	39,666	43,822	46,017	47,108	43,902	34,883	41,493
280	MAI	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0
280	Material	164,595	12	13,716	10,795	12,967	13,378	12,608	14,068	12,831	14,823	14,485	15,631	17,847	11,650	13,512
280	Residential	65,778	12	5,482	3,486	5,176	5,920	6,545	5,242	5,403	5,463	5,411	6,052	5,105	5,223	6,752
280	Resi. Appr.	61,742		5,145	3,330	4,415	4,838	5,445	4,909		5,514	5,545	6,609	5,172	5,050	6,058
280	S&C	226,761	12	18,897	12,395	16,528	18,732	19,208	16,487	18,213	21,365	19,581	21,421	20,594	19,537	22,700
280	S & C Appr.	85,272	12	7,106	5,417	7,303	6,996	7,463	6,588	7,000	7,682	7,620	8,296	7,127	7,101	6,679
280	Support Tech/MOU	199,799	12	16,650	8,163	13,754	15,113	18,774	14,335	15,687	17,794	15,629	18,158	18,272	19,839	24,281
	Total 280	2,790,369	108	232,531	172,464	220,226	240,771	233,600	222,978	225,525	251,028	247,118	261,484	258,538	209,994	246,643

		Annual		Average												
Local#	Contract Type	Total		Hrs/Mo	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
659	Inside	242,934	12	20,245	12,116	17,102	18,271	22,236	17,946	17,575	21,736	20,162	24,758	22,463	24,398	24,171
659	Inside Appr.	120,052	12	10,004	5,820	8,063	8,820	10,256	8,937	9,032	11,447	10,521	12,514	11,490	11,796	11,356
659	Material	9,465	12	789	373	566	437	848	711	522	1,012	872	1,181	1,166	879	898
659	Residential	4,288	12	357	279	263	324	333	318	357	357	354	402	429	389	483
659	Resi. Appr.	2,143	12	179	148	162	146	162	182	214	206	263	231	237	80	112
	S&C	11,382	12	949	581	903	1,404	980	867	717	1,051	870	1,020	666	929	1,394
659	S & C Appr.	1,854	12	155	177	219	458	162	163	56	74	0	0	158	31	356
	Total 659	392,118	84	32,677	19,494	27,278	29,860	34,977	29,124	28,473	35,883	33,042	40,106	36,609	38,502	<u>38,770</u>

		Annual		Average												
Local#	Contract Type	Total		Hrs/Mo	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
932	Inside	89,300	12	7,442	5,629	7,234	8,400	8,560	6,998	7,401	8,019	7,455	7,355	7,806	7,077	7,366
932	Inside Appr.	44,413	12	3,701	2,697	3,231	3,699	3,914	3,426	3,793	4,280	3,746	3,708	3,925	4,151	3,843
932	MAI	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0
932	Residential	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0
932	Resi. Appr.	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0
932	S&C	7,210	12	601	497	478	648	573	462	609	702	617	653	621	627	723
932	S & C Appr.	99	12	8	0	30	0	8	0	18	30	0	13	0	0	0
	Total 932	141,022	84	11,752	8,823	10,973	12,747	13,055	10,886	11,821	13,031	11,818	11,729	12,352	11,855	11,932

Grand Total 3,323,509 276,959 200,781 258,477 283,378 281,632 262,988 265,819 299,942 291,978 313,319 307,499 260,351 297,345

IBEW LABOR HOUR RECAP, LAST 5 YEARS ALL SIGNATORIES

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2018	129,958	152,277	187,788	175,909	199,302	194,584	197,419	246,866	230,127	238,937	241,813	261,195	2,456,175
2019	235,064	267,789	302,365	274,692	291,848	269,365	243,405	312,956	299,388	305,249	332,724	289,681	3,424,525
2020	269,064	305,744	303,666	204,430	211,800	216,251	245,543	256,035	196,445	272,974	231,380	249,688	2,963,020
2021	189,192	214,593	235,405	265,649	259,752	251,572	286,491	276,130	250,956	304,417	249,043	310,748	3,093,948
2022	240,315	297,318	326,847	323,585	307,289	307,835	330,820	321,572	343,046	338,917	294,384	328,620	3,760,548
Grand Total	823,278	940,403	1,029,224	920,680	962,702	931,772	972,858	1,091,987	976,916	1,121,577	1,054,960	1,111,312	11,937,668

IBEW LABOR HOUR RECAP, LAST 5 YEARS NECA MEMBERS

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2018	100,801	121,674	149,612	140,924	160,511	152,229	156,427	200,133	190,473	197,958	202,072	222,483	1,995,297
2019	199,200	231,668	259,726	232,744	244,112	226,383	200,634	261,084	237,306	253,322	247,628	235,455	2,829,262
2020	224,793	255,228	246,899	167,739	169,124	172,186	203,008	209,747	162,195	231,451	191,467	211,496	2,445,333
2021	155,621	179,811	191,728	222,543	209,809	200,925	230,497	220,284	207,617	257,240	211,910	267,914	2,555,899
2022	200,781	258,477	283,378	281,632	262,988	265,819	299,942	291,978	313,319	307,499	260,351	297,345	3,323,509
Grand Total	680,415	788,381	847,965	763,950	783,556	751,723	790,566	891,248	797,591	939,971	853,077	937,348	9,825,791

IBEW LABOR HOUR RECAP, LAST 5 YEARS NECA CONTRACTORS - LOCAL 659

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2018	15,797	19,177	23,859	19,105	19,663	21,676	19,398	26,348	20,439	20,201	24,060	20,689	250,412
2019	14,628	17,749	20,192	16,638	23,467	18,332	17,202	23,763	19,442	22,313	26,129	26,555	246,410
2020	31,948	36,439	28,175	18,266	22,281	17,473	21,071	18,823	17,933	24,790	19,767	23,209	280,175
2021	16,260	18,904	21,099	29,410	26,543	23,292	30,519	25,376	24,065	30,546	25,720	29,935	301,669
2022	19,494	27,278	29,860	34,977	29,124	28,473	35,883	33,042	40,106	36,609	38,502	38,770	392,118
Grand Total	78,633	92,269	93,325	83,419	91,954	80,773	88,190	94,310	81,879	97,850	95,676	100,388	1,078,666

IBEW LABOR HOUR RECAP, LAST 5 YEARS ALL SIGNATORY CONTRACTORS - LOCAL 659

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2018	21,344	24,542	30,838	24,723	25,527	31,562	27,500	37,546	28,153	26,958	31,873	27,854	338,420
2019	21,197	25,620	29,205	25,630	33,395	27,182	25,193	35,508	41,951	54,575	72,625	52,457	444,538
2020	43,270	54,711	48,644	28,261	31,390	25,282	29,461	26,442	25,695	33,549	28,151	31,985	406,841
2021	22,488	26,569	30,730	38,779	36,280	34,349	40,379	35,278	33,951	40,839	35,040	40,005	414,687
2022	28,611	36,628	39,733	44,415	38,887	37,644	45,791	41,105	49,129	44,821	46,558	45,833	499,155
Grand Total	108,299	131,442	139,417	117,393	126,592	118,375	122,533	134,774	129,750	155,921	167,689	152,301	1,604,486



Safety Training Topics

March 2023

Scaffold Users & Erectors/Dismantlers Scaffold Construction Safety Scaffold Safety Case Study: Death by Scaffold

Scaffold Users & Erectors/Dismantlers

OSHA categorizes workers involved with scaffolds into two groups, erectors/dismantlers and users. Anytime that you are responsible for building or taking down a scaffold you are considered an erector/dismantler. If you are responsible for conducting work on a scaffold platform, such as painting or plastering, you are considered a user. Each group has its own safety nuisances; however they share some common hazards.

Some dangers that you may encounter when working on or near scaffolds include unsafe access to work platforms, potential collapses, coming into contact with live wires or electrical hazards, falls, and falling objects or struck-by hazards. Erectors and dismantlers also need to be wary of structural instability when working.

Anyone that is involved with erecting or dismantling scaffolds must receive proper training from a competent person. As a refresher, a competent person is defined as one who is capable of identifying existing and predictable hazards, and has the authorization to take prompt corrective measures to eliminate them.

If you are responsible for designing a scaffold, OSHA requires you to be a qualified person. This means that you have a recognized degree, certificate, or professional standing or you have extensive knowledge, training, and experience.

OSHA also requires you to conduct adequate preplanning to ensure safe erection and use of scaffolding. This process includes determining the type of scaffold necessary for the job, the maximum load of the scaffold, avoidance of electrical hazards, and assuring a good foundation.

In the event that you are required to use a scaffold, you must be properly trained to do so prior to commencing work. Employers are responsible for training you and/or any colleagues required to perform tasks while on a scaffold.

This training should include hazard recognition and avoidance, proper use and procedures for the particular type of scaffold being used, and the appropriate Personal Protective Equipment (PPE)/fall protection necessary to conduct the job safely.

REVIEW AND DISCUSSION

- > What are the two groups OSHA categorizes individuals that work with scaffolds?
- > Identify some common hazards associated with scaffolds.
- Anyone that is involved with erecting or dismantling scaffolds must receive proper training from who?

Scaffold Construction Safety

When constructing a scaffold there are number of requirements that you should be familiar with. These requirements are intended to protect you and your colleagues from becoming involved with an accident, sustaining an injury, or worse.

First, it is important that any footing and anchorage points on scaffolds are sound, rigid, and capable of carrying the maximum intended load without becoming displaced. Scaffolds must be able to support at least four times the maximum intended load. You should never use any unstable objects like barrels, boxes, bricks, or concrete blocks to support any portion of a scaffold or its planks.

Make sure that scaffold planks extend over their end supports at least 6 inches, but never more than 18 inches. Anytime that you are using poles, legs, or uprights to support a scaffold, ensure that they are plumb, and securely and rigidly braced to prevent swaying and/or displacement. You should also secure the scaffold to any permanent structures, whenever possible, using anchor bolts, reveal bolts, or other similar means.

You must install guardrails and toe-boards on all open sides and ends of platforms that are more than 8 feet above the ground or floor unless the scaffolding is wholly within the interior of a building and covering the entire floor area of any room therein and not having any side exposed to a hoist-way, elevator shaft, stairwell, or other floor openings or you are using a needle-beam scaffold and float.

Your guardrails should be 2 x 4 inches or the equivalent, installed at least 36 inches but not more than 42 inches high. They must also be equipped with a mid-rail in certain situations. You must have toe-boards in place. They should be a minimum of four inches in height. Additionally, you will need to install a screen between the toe board and the guardrail, extending along the entire opening. This will help mitigate some struck by hazards caused by falling objects.

In the event that the scaffold you are using is suspended from wire or fiber rope, it must be able to support at least six times the intended load. All hooks on blocks used for raising scaffolding must be provided with a safety latch or be "moused at the throat" to prevent the hook from becoming dislodged. Never move or alter a scaffold when it is occupied.

Anytime that the scaffold is damaged or weakened, it must be immediately repaired and not used until repairs have been completed. Finally, make sure to keep scaffolds maintained and in safe operating condition.

REVIEW AND DISCUSSION

- > What should you never use to support any portion of a scaffold or its planks?
- What do you need to install between the toe board and the guardrail, extending along the entire opening?

Scaffold Safety

Scaffold accidents cause thousands of injuries and are involved in many on the job fatalities each year. However, most, if not all of these incidents can be prevented by following some very basic safety practices and protocols. This talk will walk you through some dos and don'ts when working with scaffolds.

First, it is imperative that you have received proper training on the specific type of scaffold you are expected to work on for the given task at hand, prior to work commencing. Once you have accomplished this you should conduct a visual inspection to identify any visible hazards. This may include electrical wires in close proximity or improperly constructed scaffolding.

Prior to beginning work, make sure that you are using the scaffold as it is intended to be used and that you adhere to all load limits. It is also important that a competent person has inspected the scaffold before you use it.

You should always wear a hard hat or other approved head protection when you work on or near a scaffold. You should also wear proper footwear with nonslip soles and a personal fall arrest system whenever required.

While you are working on the platform, be sure to look out for colleagues on the scaffold and below. There should also be toe boards and other protective measures in place to prevent struck by hazards. Make sure to avoid any sudden movements and/or reaching too far beyond the edges of the platform. Don't take chances!

Never keep debris or unnecessary materials on the scaffold platform. If you do, there is a much greater risk of a slip, trip or fall and/or items being knocked off the scaffold and striking someone below. Do not leave materials or equipment on the platform at the end of the day. Never use an outdoor scaffold in stormy or windy weather, or if it's covered with ice or snow.

You should also avoid hitting a scaffold with anything such as a truck, a forklift, or load of lumber. In the event that this occurs, stop using the scaffold immediately until it is deemed safe for use again by a competent person. Anytime you are unsure if conditions are safe, consult with your supervisor.

Additionally, any changes in the types of scaffolds, fall protection, falling object protection, or other equipment require re-training. Similarly, in the event that there are indications that workers have not retained information initially taught, they should also be re-trained.

REVIEW AND DISCUSSION

- > What should you wear on your head when working on or near a scaffold?
- > When should you never use an outdoor scaffold?
- > When should workers be re-trained on scaffold safety?

Case Study: Death by Scaffold

Recently a plaster laborer died after falling from a scaffold and striking his head on asphalt pavement. The victim and a co-worker had erected the welded tubular scaffolding on the outside wall of a single-story building, and planned to bring the railings and access ladder to the worksite the next day.

Near the end of the workday, the victim returned extra tools and equipment to the supply truck, removed his safety helmet, and returned to the scaffold area. The co-worker was positioned on the top of the unguarded scaffold, 12 feet from the ground, when the victim started to climb the scaffold bracing.

The co-worker was turned away from the victim, but heard a clanging sound on the bracing. He turned to see the victim lying on the ground, and called to an employee of a nearby business to summon an ambulance. The ambulance transported the victim to an emergency room, where he died 6 hours later of head and spinal injuries.

The employer was a plaster and steel frame contractor that had been in business for about 20 years and employed about 35 workers on a year-round basis. The superintendent directed a safety program that included a written general safety policy, periodic worksite visits, and weekly toolbox safety meetings. Task-specific safety procedures, including working on scaffolds, were unwritten but were communicated verbally to employees.

Records had been maintained of employee participation at the safety meetings for over two years, and there was no record that the victim had attended any safety talks related to fall prevention or scaffold safety during that time.

The victim had been employed by the company for 14 years, and had worked on scaffolds frequently. The company provided on-the job training to employees, including training on appropriate use of personal protective equipment. This was the company's first fatality.

Investigators concluded that, to prevent similar occurrences, employers should:

- Ensure that safe access is provided to the work platforms of all scaffolds
- Ensure that adequate fall protection is used by workers on scaffolds
- Evaluate their current written safety program and incorporate specific training procedures that emphasize the importance of recognizing and avoiding hazards in the workplace. These procedures should include, but not be limited to, conducting hazard evaluations before initiating work at a job site, and implementing appropriate controls
- Encourage workers to actively participate in workplace safety

REVIEW AND DISCUSSION

> What type of Personal Protective Equipment could have prevented this fatality?



February 2023

Workplace fatalities on the rise, feds say Fatal work injuries in U.S. increased almost 9% in 2021, according to feds......8

CSB: 6 safety issues led to the Husky Superior Refinery explosion that injured 36 workers......**12**

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February 2023

In This Month's Issue

News Briefs	<u> </u>	Real Life Safety Why did supervisor order staffer to stay n 114 degree workspace? 24
What Would You Do? Does another company's word on equipment's safety make it OK to skip inspection?	ا ا - الجاري - الحالي - المحالي -	Training Tips Can't avoid a long shift? 3 ways to lower the risk of fatigue-related injuries 25
You Be the Judge Was foreman's death due to lack of training or unpreventable employee misconduct?	Artio	Fatal work injuries in U.S. increased almost 9% in 2021, according to feds8
Safety Case Study 3 practical tools to help you make workers feel empowered to speak up about safety	14	CSB: 6 safety issues led to the Husky Superior Refinery explosion that injured 36 workers 12
Real Life Safety Supervisor protected workers from one danger: But did she open the door to another?	20 15	Feds: 2018 fire that injured 23 workers caused by multiple process safety issues 18
 Test Your Knowledge What to expect if an OSHA inspector comes to visit 	1 6	Tragic struck-by fatality shows how ever-evolving worksites constantly present new hazards 22
Who Got Fined and Why Blocked exits, no fire extinguishers, missing signs: Millions in fines!	20	

News Briefs Safety Stories You Might Have Missed

Investigations at Amazon result in citations for injury, illness recordkeeping violations

December 20, 2022

Ongoing investigations at six Amazon warehouse facilities in five states have led to citations for failing to properly record work-related injuries and illnesses.

Amazon faces \$29,008 in proposed penalties.

Investigations began after OSHA received referrals from the U.S. Attorney's Office in July at Amazon locations in Florida, Illinois and New York. More referrals came in August for locations in Colorado and Idaho as well as another New York facility.

Read more 🖸

Chick-fil-A franchisee in hot water for allowing teen workers to operate trash compactor

December 20, 2022

A North Carolina Chick-fil-A franchisee is in hot water with the U.S. Department of Labor (DOL) for allowing three teen workers to operate a trash compactor.

Good Name 22:1 LLC will pay \$6,450 to address the child labor law violations as well as \$235 in back wages to the seven employees who were paid in meal vouchers.

The Fair Labor Standards Act (FLSA) prohibits minors from operating motor vehicles, forklifts, trash compactors and other kinds of hazardous equipment. It also prohibits minors under the age of 14, and 14and 15-year-old employees, from working later than 9 p.m. from June 1 through Labor Day and past 7 p.m. the remainder of the year. Teen workers can't work more than three hours on a school day, more than eight hours on a non-school day or more than 18 hours per week.

Read more C

CSB report: 4 safety issues led to 2019 explosion involving build-up of 'popcorn polymer'

December 21, 2022

Accumulation of a dangerous substance known as popcorn polymer in a temporary dead leg of piping is what led to the 2019 explosion and fire at a Port Neches, Texas chemical facility, according to a U.S. Chemical Safety and Hazard Investigation Board (CSB) report.

The resulting pressure wave destroyed parts of the facility and injured two employees of the facility's operator, TPC Group, and a security contractor. Nearby homes and buildings were damaged in the blast, which was reportedly felt up to 30 miles away.

Read more 🗹

Bakery franchise burned by DOL for allowing teen workers to operate ovens

December 23, 2022

Crumbl Cookies, a bakery franchise with more than 600 locations in 47 states, is in trouble with the U.S. Department of Labor (DOL) for allowing teen workers to operate ovens at 11 of its locations.

An investigation by the DOL Wage and Hour Division found 11 franchisees in six states – California, Minnesota, New Hampshire, Tennessee, Utah and Washington – allowed teen workers to operate industrial ovens and other potentially hazardous bakery equipment.

Investigators also found the minor employees were allowed to work more hours than the law allows.

The division issued \$57,854 in fines to resolve the child labor violations of the Fair Labor Standards Act (FLSA).

Read more 2

NTSB: Renewed effort needed on Most Wanted List of Transportation Safety Improvements

December 27, 2022

The National Transportation Safety Board (NTSB) is calling for a renewed effort to implement the safety recommendations it suggested on its 2021 Most Wanted List of Transportation Safety Improvements.

Five of the 10 areas the 2021 list focuses on is road safety. Traffic fatalities are up since the beginning of the pandemic, and in response, the NTSB has called for adoption of the Safe System Approach. The Safe System Approach protects drivers and pedestrians through changes in road and vehicle design along with use of new safety technology.

Read more 🗹

Carlos' Law will increase penalties for companies held liable for death, injury of employee

December 28, 2022

New York's Penal Law has been amended under new legislation, known as Carlos' Law, to increase penalties for criminal corporate liability for the death or injury of an employee.

Governor Kathy Hochul signed the legislation Dec. 23, raising the fine for felonies or misdemeanors relating to an employee's death or serious physical injury up to \$500,000.

The law was prompted by incidents in the construction industry, but there is no language limiting it to a single industry.

Another thing to consider is that Carlos' Law applies to all injuries, not just serious physical injuries, and that fines stemming from this law would be separate from those imposed by OSHA or other local agencies.

Read more 🗹

CSB data shows 'significant uptick in reportable events' for 1st quarter of FY 2023

December 29, 2022

Data compiled by the U.S. Chemical Safety and Hazard Investigation Board (CSB) for the first quarter of fiscal year 2023 reveals "a significant uptick in reportable events during the quarter."

Thirty-six events were reported to the CSB from Oct. 1 through Dec. 26. Eight of those occurred during the Christmas holiday weekend. That's more than double the number of events for the first three months of the previous two fiscal years, with 2021 having 16 events in that timespan and 2020 with 14.

While the uptick in reportable events may have been due to record low temperatures across most of the country, companies still "need to heighten their focus on safe operations and recognize that taking important precautionary actions, like winterization, can help prevent major chemical accidents," CSB Chairperson Steve Owens said.

Read more 🗳

New York's new warehouse law targets unlawful work speed quotas

January 3, 2023

New York Governor Kathy Hochul signed the Warehouse Worker Protection Act into law, protecting warehouse workers from unlawful or undisclosed work speed quotas.

This legislation will also protect workers from adverse employment actions, such as disciplinary action or termination, exclusively because of a failure to meet undisclosed speed quotas or quotas that do not allow for proper breaks.

Work speed quotas at warehouses have been blamed for high injury rates at companies such as Amazon, which has come under scrutiny after allegations that the company pushes workers too hard and doesn't allow them to take adequate breaks.

Read more 🖸

3 hazardous and widely used chemicals may be on the way out soon

January 4, 2023

Three persistent, bioaccumulative and toxic chemicals are at the top of EPA's list for significant restrictions, and perhaps an eventual ban on one or more.

The exposure risks and long-term health effects are most serious for chemical industry workers who handle the substances. EPA and OSHA warn that chemical manufacturers, distributors and importers don't always take safety precautions seriously and that even experienced professionals fail to wear PPE for eye, face, hand and whole body protection on a consistent basis.

EPA plans to crack down on these three chemicals through one or more Toxic Substances Control Act (TSCA) rules each over the next two years:

- perchloroethylene (perc)
- n-methylpyrrolidone (NMP), and
- 1-bromopropane.

Read more 🗹

White House still reviewing OSHA's permanent COVID-19 healthcare standard

January 5, 2023

While OSHA submitted its proposed permanent COVID-19 healthcare standard to the White House Office of Management and Budget for final review in early December, nothing has been heard about it since.

Review timelines at the Office of Management and Budget's Office of Information and Regulatory Affairs (OIRA) vary, and law firm Seyfarth Shaw said the rule will likely go into effect by the late first quarter or early second quarter of 2023.

Read more 🗹

OSHA: Airline retaliated against whistleblowers who reported work-related illnesses

January 5, 2023

American Airlines retaliated against whistleblowers who reported worker illnesses from toxic fumes inside aircraft cabins, according to OSHA.

The agency initiated a whistleblower investigation on Aug. 2, 2022, finding American Airlines retaliated against flight attendants who filed complaints about the illnesses with the company.

Flight attendants who filed complaints told OSHA that the airline "docked attendance points and discouraged them from reporting work-related injuries and illnesses."

Read more 🗹

What Would You Do?

Does another company's word on equipment's safety make it OK to skip inspection?

Manager Mike Kelly was on a safety walk around the outside of the shipping dock when he spotted a few maintenance workers walking around a trailer.

"Hey, guys," Mike said. "This a new trailer?"

"New to us, yeah," Jacob Hamilton, the head of maintenance, said. "We just got it from another company. I knew a guy in their maintenance department, and he hooked us up."

"Nice," said Mike. "So you're inspecting it before we put it in service."

'We don't have time or manpower to waste'

"We're giving it a once over, nothing major," Jacob said. "The maintenance guy from the other company said it's in good shape, so we're not wasting time with a detailed inspection."

"Then how do you know it's safe to use?" Mike asked.

"Because my friend said it was OK," Jacob explained, his frustration with Mike beginning to show. "We're extremely busy in the shop right now, and I'm not wasting time on something that my friend vouched for."

"Our standard procedure here is to inspect equipment ourselves before it gets put into service," Mike said. "Someone else's standards may not be as high as ours."

"Well, this is an exception to the rule," said Jacob. "The guy I know at the other shop said it's good to go. We don't have time or manpower to waste, so this trailer is getting put into rotation."

If you were Mike, what would you do in this situation?

How trustworthy are the people involved?

One perspective in this situation is that if the head of maintenance trusts this other maintenance man, someone he keeps referring to as a friend, then maybe we can too. That is if we find that the head of maintenance is trustworthy.

Just say this maintenance man at the other company went over this trailer with a fine-toothed comb, and the head of maintenance knows that his friend would do so, it would be OK this one time. Especially since the head of maintenance is at least giving the trailer a quick look to be sure.

Granted, there is a lot of trust needed from everyone for this to work, and you certainly wouldn't want to set a precedent by allowing it even just once.

Stick to the rules, do a proper inspection

Probably the best response in this case is to just stick to the rulebook. If standard procedure says every piece of equipment needs to be inspected thoroughly to ensure safety, then every piece of equipment gets inspected. End of story. Allowing the trailer to go through without a proper inspection would rely on a lot of assumptions. Mike has to assume the head of maintenance really trusts this other maintenance man. He also has to assume the head of maintenance's trust is well-placed. Then there's the question of can Mike and the head of maintenance trust that this other maintenance man wasn't rushed or careless when he performed his inspection?

The only way to know for sure if the trailer is safe to use is to inspect it. After all, the head of maintenance and another member of his crew were already out looking it over. Why not just take the extra time and make certain it's safe?

Lack of trailer inspections leads to fatal haul truck crash

An incident involving a fatal haul truck crash at a New Mexico mine illustrates why the best practice is to perform detailed inspections before putting equipment into service.

On September 21, 2021, Gerardo Herrera, a contract truck driver with 20 years of experience, was hauling rock from a mining pit to a load-out area. Herrera had to make several trips back and forth on the mine's main haul road to perform this task.

After dumping 16 loads of rock, Herrera was making the run back for another load when his truck swerved off of the haul road and turned sideways.

What Would You Do?

Does another company's word on equipment's safety make it OK to skip inspection? (continued)

Other drivers who witnessed the crash responded. They found Herrera laying on the ground in front of his truck, but he was unresponsive. A short time later, the drivers found that Herrera didn't have a pulse.

Trailer's brake system had many deficiencies

Based on interviews, observations at the accident scene and Herrera's injuries, U.S. Mine Safety and Health Administration (MSHA) investigators found that:

- Herrera lost control of the haul truck, exited the cab and was impacted by the truck
- the haul truck jack knifed, causing the tractor to turn and travel to the side of the road
- it's unknown when Herrera exited the cab or whether he was wearing a seat belt, and
- the truck rolled backward over Herrera after he exited the cab, causing him to be found in front of the truck.

Investigators found no hazards along the main haul road that would've caused the crash.

Herrera drove the equipment involved for two days before the accident. There were no records indicating pre-operational inspections of the trailer, which was a rental, were conducted. Because of the number and type of deficiencies found in the trailer's braking system after the accident, investigators found that the trucking company didn't ensure adequate inspections were performed before placing a tractor-trailer in service.

Trucking company no longer provides haulage services

MSHA determined that the root causes of the fatal crash were the trucking company's failure to:

- maintain the trailer's brakes in a functional condition, and
- assure that Herrera performed an adequate pre-operational inspection on the haul truck.

After the incident, the trucking company assured MSHA that the trailer would never be used on mine property again and that it would no longer provide haulage services at mines.

The mine operator promised to observe contractor truck drivers perform inspections of their haul trucks as soon as they enter the mine property and said it would assure that contract truck drivers have the skills necessary to perform tasks in a safe manner.

Read more What Would You Do? in your Membership Dashboard 🗹

BLS DATA REVEALS THAT THERE WERE 5,190 WORKER DEATHS IN 2021

INJURIES Fatal work injuries in U.S. increased almost 9% in 2021, according to feds

🚺 by Merriell Moyer

here were 5,190 fatal work injuries in the U.S. in 2021, an 8.9% increase from 4,764 in 2020, according to data from the U.S. Bureau of Labor Statistics (BLS).

The fatal work injury rate for 2021 was 3.6 fatalities per 100,000 full-time equivalent (FTE) workers up from 3.4 per 100,000 FTE in 2020. This is also up from the 2019 pre-pandemic rate of 3.5.

This marks the highest fatal occupational injury rate since 2016, with one worker dying every 101 minutes from a work-related injury in 2021.

BLS released its data on nonfatal workplace injuries in November.

Transportation incidents remain most frequent fatal event

Transportation incidents remained the most frequent type of fatal event in 2021 with 1,982 fatal injuries, an increase of 11.5% from 2020. This category accounted for 38.2% of all work-related fatalities for 2021.

The transportation and material moving occupations experienced a high of 1,523 fatal work injuries in 2021. This represents the occupational group with the highest number of fatalities, with an increase of 18.8% from 2020.

However, despite an increase from 2020 to 2021, transportation incidents are still down 6.6% from

2019 when there were 2,122 fatalities.

Fatalities involving people of color reach all-time high

The share of Black or African American workers fatally injured on the job reached an all time high in 2021, increasing from 11.4% of total fatalities in 2020 to 12.6% of total fatalities in 2021.

Deaths for this group climbed to 653 in 2021 from 541 in 2020, a 20.7% increase. The fatality rate increased from 3.5 in 2020 to 4.0 per 100,000 FTE workers in 2021.

Black or African American workers, as well as Hispanic or Latino workers had fatality rates (4.0 and 4.5 per 100,000 FTE workers, respectively) in 2021 that were higher than the all worker rate of 3.6. Transportation incidents were the highest cause of fatalities within both of these groups (267 for Black or African American workers and 383 for Hispanic or Latino workers).

The second highest cause of fatalities to Black or African American workers were injuries due to violence and other injuries by people or animals (155). Almost a quarter of Black or African American workplace fatalities (23.7%) were a result of violence and other injuries by persons or animals as opposed to 14.7% for all workers. For Hispanic or Latino workers the second highest cause of fatalities was falls, slips, or trips (272).

Women made up 8.6% of all workplace fatalities but represented 14.5% of intentional injuries by a person in 2021.

Workers between the ages of 45 and 54 suffered 1,087 workplace fatalities, a 13.9% increase from 2020, which accounted for just over one-fifth of the total of fatalities for the year, or 20.9%.

Fatalities from violence, harmful substances, falls increased

Fatalities from violence and other injuries by people or animals increased from 705 fatalities in 2020 to 761 fatalities in 2021. Intentional injuries by a person, the largest subcategory, increased 10.3% to 718 in 2021.

Exposure to harmful substances or environments reached the highest figure since this series began in 2011 with 798 worker fatalities in 2021. This category experienced the largest increase in fatalities in 2021, with an 18.8% increase over 2020. Unintentional overdoses from non-medical use of drugs or alcohol accounted for 58.1% of these fatalities, up from 57.7% in 2020.

Work-related fatalities from slips, trips and fall increased 5.6% in 2021, from 805 fatalities in 2020 to 850 in 2021. Slips, trips and falls in construction and extraction occupations accounted for 370 of these fatalities, which increased 7.2% over 2020. Despite the increase, these numbers are still down 9.3% when compared to 2019 when construction and extraction workers experienced 408 fatalities from slips, trips and falls.

OSHA, NSC respond

Doug Parker, the U.S. Department of Labor Assistant Secretary for OSHA, and the National Safety Council (NSC) expressed their disappointment with these numbers.

The BLS announcement "of a one-year increase of nearly 9% in fatal work injuries serves as a call to action for OSHA, employers and other stakeholders to redouble our collective efforts to make our nation's workplaces safer," Parker said.

"Each of these deaths cruelly impacts these workers' families, friends, co-workers and communities," Parker continued. "They are clear reminders of the important work that must be done. OSHA and its thousands of professionals across the nation are determined to enforce the law while working with employers, workers, labor unions, trade associations and other stakeholders to ensure that every worker in the U.S. ends their workday safely." NSC President and CEO Lorraine Martin said the BLS data shows that workplaces have become less safe.

"Everyone deserves the chance to live their fullest life," Martin said. "This report shows our mission to save lives, from the workplace to anyplace, is critical, and NSC is committed to doing its part to curb this deadly trend and put an end to preventable workplace fatalities."

Read this story online 🗹

Sharpen Your Judgement

Was foreman's death due to lack of training or unpreventable employee misconduct?

Safety Manager Pete Travers was having a difficult time hiding his grief.

"Come on, Pete," John Jenkins, the company attorney, said. "I need you to stay focused. You're upset over his death. That's understandable, but I need all the details of the incident so we can fight his OSHA citation."

"OK," Pete said. "You're right. I'm ready to continue now."

Device stuck on telephone lines

"Jean, Jamie and Lionel were putting up fiberoptic cables in a remote, off-road location," Pete began. "There was no way to get a bucket truck into this location, so they had to climb up the telephone poles to perform their work.

"They would climb a pole, place a device called a lasher, then walk the lasher from the ground to the next pole," Pete explained. "The lasher would attach the fiberoptic cable to the support line as it moved along.

"However, the lasher got stuck while it was over a pond," said Pete.

"And that's when everything went wrong?" John asked.

No ladders, no poles long enough to reach

"Yes," said Pete. "The crew had to get the lasher working again, and the best way to do that would be with a ladder. But they didn't bring any ladders with them. They also didn't have enough layup stick sections to reach the lasher."

"What's a layup stick?" John asked.

"It's a long pole with a hook on the end," Pete said. "We typically have four or five sections of layup stick on a truck, but Jean's crew only had three. That's not long enough to reach.

"Instead of coming back to the shop for a ladder or calling another crew for help, Jean's crew tried multiple extremely unsafe methods to get to the lasher," Pete explained.

Multiple unsafe methods attempted

"They climbed nearby trees and stood on an overturned trash can while trying to reach the lasher with the short layup stick," said Pete. "Finally, Jean decided to attempt a midspan excursion, which is extremely dangerous unless you have the right equipment."

John's confusion was written all over his face.

"A midspan excursion is when a technician climbs up a pole and then goes out onto the cables," Pete explained. "It's rarely necessary. In this case, Jean didn't even have the right equipment to do it safely."

"But he did it anyway," John said.

"Yes," Pete replied. "Jean made a makeshift traversal harness out of some fall PPE. He died when the harness rode up his body to his chest, causing him to asphyxiate. Then Lionel tried the same method to rescue him and almost got killed in the same way.

"They all knew better," Pete added. "Despite working here for only a short time, they were experienced technicians."

"Who was responsible for making sure ladders and layup sticks were on the truck?" John asked.

"The foreman," Pete replied. "That would've been Jean's job."

"This is clearly a case of unpreventable employee misconduct," John said. "We can definitely beat this citation."

Pete's company fought the citation. Did it win?

Decision on next page

Sharpen Your Judgement

Was foreman's death due to lack of training or unpreventable employee misconduct? (continued)

The decision

No, Pete's company lost when an administrative law judge with the Occupational Safety and Health Review Commission found the company's safety training was lacking.

OSHA claimed that the company failed to adequately train its employees and failed to provide employees with the tools and equipment to perform the job safely. The company argued its workers had years of experience and onthe-job training and that it ensured everyone had access to its extensive safety manual.

However, the company's training records revealed that the three workers involved in the incident had never received any safety training. While all three employees had experience in the telecommunications field, the company failed to even check to see what kind of training any of them had. Further, none of them had any current certifications, but they were hired anyway and immediately put to work in the field.

No documentation to prove he should've known better

The judge found the company assumed the three workers knew what they were doing based on their previous experience and sent them out into the field without safety training or the proper tools and equipment to ensure the job was done safely. Even if the foreman who died should have known better than to perform a midspan excursion based on his previous experience, the company had no documentation showing it instructed him that such an action was dangerous. Upon examination of the company's safety manual, the judge also found there was no mention of midspan excursions or how to safely address a lasher that was stuck, which was a common occurrence.

All of this evidence supported OSHA's allegations, leading the judge to uphold the citation.

Analysis: Experience doesn't replace safety training

This is a somewhat extreme case, since the company clearly didn't do its due diligence in ensuring its new workers were trained and provided with the proper equipment.

However, it clearly illustrates the fact that experience isn't an adequate replacement of thorough safety training.

An employee may have worked for decades doing a specific job. They may know that job inside and out. But they also may have developed or learned unsafe habits during those years. There's no way to know how extensive their previous employer's training was or whether it was even provided.

As safety professionals know, that's why the best bet is to assume they don't know and train them anyway. At the very least, even if they do already know, they'll get a refresher and that's never a bad thing.

Cite: Secretary of Labor v. Eustis Cable Enterprises, Occupational Safety and Health Review Commission, No. 20-1006, 11/10/2022. Dramatized for effect.

Read more You Be The Judge in your Membership Dashboard 🖸

HAZARDS

CSB: 6 safety issues led to the Husky Superior Refinery explosion that injured 36 workers

by Merriell Moyer

U.S. Chemical Safety and Hazard Investigation Board (CSB) investigation into the April 2018 refinery explosion and fire at the Husky Superior Refinery revealed six major safety flaws.

The explosion and fire at the refinery in Superior, Wisconsin injured 36 workers, caused \$550 million in damage and released 39,000 pounds of flammable hydrocarbon vapor into the air.

More than 2,500 residents of the City of Superior had to be evacuated from their homes and the residents of Duluth, Minnesota were required to shelter in place.

At the time of the incident, the refinery was owned by Husky Energy, which purchased the refinery only six months earlier from Calumet Specialty Products. Husky has since merged with Cenovus Energy.

Incident occurred during routine maintenance

The incident occurred when the refinery was shutting down its fluid catalytic cracking (FCC) unit to perform planned maintenance. This maintenance was called a "turnaround" and is a common refining process.

Two vessels in the FCC unit exploded, launching shrapnel more than 1,000 feet away. The shrapnel punctured an asphalt storage tank, spilling 17,000 barrels of hot asphalt that ignited, causing multiple fires.



In addition to the smoke from the fires, the City of Superior evacuated based on the potential release of highly toxic hydrofluoric acid (HF), which was stored and used at the refinery. Thankfully, an HF release didn't happen, although the HF storage tank was closer to the explosion than the punctured asphalt tank was.

Transient operation safeguards

"Transient operation" is when a process isn't operating in its normal state, such as the shutdown process performed before a maintenance outage.

In its investigation report, the CSB emphasizes the importance of separating air from flammable hydrocarbons during an FCC shutdown to prevent an explosive mixture. FCC technology processes air and flammable hydrocarbons inside interconnected process equipment, increasing the likelihood of an explosion. That's why this equipment requires safeguards.

However, at the Husky Superior Refinery, those essential safeguards either weren't implemented or weren't effective at the time of the incident.

Process knowledge

FCC unit expertise was mostly inhouse throughout the refinery's history under several owners. External experts were used on a limited basis, and the refinery had "minimal technical engagement" with other facilities.

This led to employees who didn't adequately understand how to effectively control the FCC unit's transient operation hazards.

Process safety management

The refinery failed to adequately maintain process safety information, operating procedures, process hazard analyses and operator training when it came to its FCC unit.

Industry knowledge and guidance

Despite CSB industry educational efforts on an FCC unit at a different facility made less than one year before this incident, Husky Superior Refinery employees weren't aware of lessons learned from that earlier incident.

Information from that 2015 incident in California could have helped the Husky employees to prevent the April 2018 explosion and fire, according to the CSB.

There currently is no industry publication on basic process safety expectations for all FCC units as this technology was developed and licensed by more than six companies that each have their own unique designs.

Brittle fracture during extreme events

The metal shrapnel that penetrated the asphalt storage tank was caused by brittle fracturing of the primary and sponge absorber vessels in the FCC unit.

These vessels shattered like breaking glass during the explosion, sending more than 100 pieces of metal debris throughout the refinery.

The absorber vessels weren't constructed of tougher grades of steel that are now recommended

in the construction of new vessels. With tougher grades of steel, an equipment failure will result in the vessels tearing open rather than fracturing. This is meant to reduce the likelihood of shrapnel impacting the surrounding area.

Emergency preparedness

The fires from the asphalt release occurred because the refinery wasn't prepared for the size of the release. There were also competing priorities due to the explosion itself, which left injured workers who had to be tended to and fires that needed extinguishing around the FCC unit.

10 recommendations made to refinery, new owner

The CSB made 16 recommendations in its investigation report, with 10 of those aimed at the refinery and its new owner, Cenovus Energy.

Recommendations made to the refinery include:

- establishing safeguards to prevent explosions in the FCC unit during transient operations
- determining appropriate points in the FCC unit's shutdown procedures to shut down all wet gas compressors and incorporate this information into procedures and training materials
- developing a slide valve mechanical integrity program addressing erosion and ensuring proper functioning of slide valves during a shutdown
- developing emergency procedures for responding

to a loss of catalyst slide valve function

- developing guidance for analyzing operating procedures to improve transient operation hazard evaluations during process hazard analysis
- developing an FCC unit operator, supervisor and manager training program based on available industry guidance, and
- incorporating lessons learned from this incident into the appropriate training materials for the refinery's emergency response team.

Recommendations made to Cenovus Energy include:

- developing an FCC unit-specific process hazard analysis guidance document for all Cenovus operated refineries with FCC units
- developing a technology-specific knowledge-sharing network program across all Cenovus operated refineries, and
- maintaining FCC technology operating manuals in the process safety information packages for all FCC units, including the unit at the Superior Refinery.

Read this story online 🗹

Case Study

3 practical tools to help you make workers feel empowered to speak up about safety

A good safety culture is something safety professionals strive for. But you can't build one if workers feel sidelined when they speak up about safety issues.

Workers who feel like they're not allowed to have a voice aren't going to speak up, and that's going to undermine any attempt at building a good safety culture.

The difficulty with differences

Part of the problem can be the difficulty people feel when talking with someone who is different from them in some way.

What makes it so difficult to talk to people who are different, whether the differences are in gender, race, generation, orientation, religion or even a different political perspective?

Typical answers to that question include:

- I feel awkward.
- I'm concerned that I may say the wrong thing.
- I don't know what to say at all.
- I don't want to upset the other person.

Now imagine how any of those feelings could impact an organization, when a large group of people don't know how to talk with people who are different.

You, your clients and colleagues can feel excluded when you don't know how to talk with people who are different or who hold different opinions. Diverse talent doesn't want to stick around at a company when they don't feel valued. There's also low employee engagement which leads to tardiness, high turnover and little chance to build a good safety culture.

Cultural intelligence i s the key

When workers feel like their feelings and experiences are validated they feel like they belong. They feel safe to voice their concerns.

Developing and applying cultural intelligence is the key to making any worker feel comfortable enough to talk about the safety issues they see.

Cultural intelligence is the skill that allows us to talk to people who have a different perspective or background than we do. However, it's not a skill people are born with - it's something that needs to be developed over time.

There are five elements that make up cultural intelligence:

 Curiosity to learn more about the other person, but not so much that you make



the other person feel like you're being invasive.

- Contemplative. That means slowing down and being more thoughtful about what the other person is saying to you.
- Courage to reach across the aisle to speak to someone you don't agree with on some level.
- **Context.** Learn about their story and experiences to better understand them.
- Compassion. Even if you don't agree with them or have never experienced what they've experienced, when you hear someone out you can still express compassion.

There are three practical tools to help in using cultural intelligence:

STOP

STOP is an acronym for:

- Slow down.
- Take three deep breaths.
- Observe your reaction and feelings of the other person.
- Psychological safety. That means you must ensure your own psychological safety before approaching the other person with compassion and curiosity.

SAFETY NEWS & TRAINING ALERT

Case Study

3 practical tools to help you make workers feel empowered to speak up about safety (continued)

Ask

To avoid allowing your curiosity to overpower the other person, ask them gently, "Can I ask you a question?" Or, "How did this make you feel?"

Check

Check for the five elements of cultural intelligence outlined above. This will allow you to check your own impact on the other person.

(Adapted from "How to Boost Safety and Productivity With Cultural Intelligence," a presentation by Amy Narishkin, Chief Executive Officer, Empowering Partners LLC, at the ASSP Safety 2022 Conference + Expo)

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Supervisor protected workers from one danger: But did she open the door to another?

"Whoa, stop right there!" Supervisor Carrie Lee said. "Who told you guys to use a forklift for this job?"

Nick Robbins turned off the forklift he had parked near the worksite. "No one told us to," he said. "But we have to get these pipes down somehow."

Nick and his team were attempting to use the lift to unload large pipes from the back of a flatbed truck.

"How much do those pipes weigh?" Carrie asked.

"Four hundred pounds," Nick answered.

"Right," Carrie said. "And that lift isn't designed to carry nearly that weight.

"Untie the straps around the pipes and push them off the truck bed instead."

They did the job by hand

Nick and three of his co-workers unstrapped the pipes and climbed

on top of the stack of pipes. They pushed the first one to the ground with a loud thud.

"OK, guys, just three more to go," Nick said, wiping the sweat from his brow.

As he and his co-workers tried to dislodge another pipe from the pile, Nick suddenly lost his footing.

He fell from the truck's bed and scrambled to get to his feet, while his co-workers did everything they could to stop the pipe's momentum above.

They were helpless to stop it. The pipe rolled from the pile, and landed on Nick's head, killing him instantly.

The state's OSHA department investigated Nick's death.

Result: Inspectors found fault with the company's decision to have workers push the heavy unsecured loads by hand. They issued tens of thousands of dollars in fines.

What supervisors need to know

Being a good supervisor requires more than enforcing rules. It requires making sure whatever orders you give are the safest possible way to do a job.

Good safety supervisors will always step in when they observe workers making a mistake. But they should also:

- Explain why the behavior is unsafe. Tell them what could go wrong.
- Take a step back. Work with employees to come up with a better way to do the job.
- Consider all the angles. Make sure the way you'll handle the situation doesn't have unintended safety drawbacks.

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SAFETY NEWS & TRAINING ALERT

What to expect if an OSHA inspector comes to visit



If an OSHA inspector showed up, would you know what to do? It's a situation no one wants to be in. But it's better to be safe than sorry if there's a knock on the door.

Answer *True* or *False* to the following to test your knowledge of OSHA's safety inspections.

1 TRUE OR FALSE: If an OSHA inspector arrives, it is illegal for you to accompany the inspector during the safety walkthrough.

2 TRUE OR FALSE: An OSHA inspector has the right to photograph or videotape workplace conditions during the inspection. It's only against the rules to do so if a company's trade secrets will be revealed.

3 TRUE OR FALSE: Any fines your company incurs for safety violations must be paid before the OSHA inspector leaves the work site.

Go to the following page to see if you are correct.

Test Your Knowledge

Answers from previous page

- **1 FALSE:** A representative of the company is allowed to accompany the inspector. It's best for a company to choose a company rep to do this before an OSHA inspector shows up. But if there's no company rep available, either request for the inspector to wait until one arrives or accompany the inspector yourself.
- **2 TRUE:** An OSHA inspector will most likely take pictures or video of workplace conditions. Best bet: Supervisors or company reps should also take their own photos and videos. It's wise to take notes during an inspection, as well.
- **3** FALSE: An OSHA inspector should never be paid directly for a fine after an inspection. If you are asked for money for a safety violation, refuse to pay until you see safety credentials.

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SAFETY MANAGEMENT

Feds: 2018 fire that injured 23 workers caused by multiple process safety issues



by Merriell Moyer

INVESTIGATORS FOUND 17 SAFETY ISSUES LED TO INCIDENT

n investigation into the 2018 fire that injured 23 workers at the Kuraray America chemical plant in Texas was caused by 17 safety issues, including multiple process safety failures, according to the U.S. Chemical Safety and Hazard Investigation Board (CSB).

The CSB report offers a dozen recommendations on how the company can prevent a similar incident from occurring.

2,300 pounds of ethylene released in 3 minutes

On May 19, 2018, a chemical reactor system startup that occurred

following a scheduled maintenance shutdown caused high pressure conditions inside the reactor.

The high pressure activated the reactor's emergency pressure release system, discharging flammable ethylene vapor through piping into an area where several contractors were working. More than 2,300 pounds of ethylene were released in three minutes.

Work being done by the contractors included welding, which "most likely ignited the flammable vapor," according to the CSB.

Twenty-three workers were injured during the incident, with two needing to be life-flighted from the facility and another remaining in critical condition for several days due to burn injuries. Nineteen other workers were transported to the hospital for various injuries.

Incident caused by 'chain of process safety failures'

CSB investigators determined that the cause of the incident was Kuraray's emergency pressure relief system design, which discharged the flammable ethylene vapor from the reactor through horizontally aimed piping into the air in an area near workers.

If this pressure release system had been designed to discharge vapor into a safe location, the flammable gas wouldn't have harmed any workers, according to CSB investigators.

"Kuraray also should have evacuated these workers from the area when the reactor's high-pressure alarm sounded, since it was signaling a serious problem with the reactor," CSB Chairperson Steve Owens said.

Investigators found "a chain of process safety management failures that led to the build-up of excessive pressure inside the reactor."

Those failures include:

- emergency pressure relief system discharge design
- presence of nonessential workers during startup and upset conditions
- hazardous location
- recognized and generally accepted good engineering practices
- process hazard analysis safeguards
- process hazard analysis recommendations
- warning signs
- equipment design
- operating procedures
- operator training
- abnormal operating conditions
- safety interlock disabling
- alarm management
- process alarm response
- safe operating limits
- environmental permit limits, and
- safety management system selfassessment audits.

12 ways to avoid a repeat incident

The CSB advised Kuraray America to follow 12 recommendations to avoid a repeat of this incident.

Those recommendations include:

- developing an emergency pressure relief system design standard to ensure discharge to safe locations
- implementing a site-wide system to evacuate nonessential personnel during startup and certain other conditions
- developing a system requiring periodic evaluation of the effectiveness of any safeguard used to lower the risk of process safety hazards
- developing a policy detailing how to effectively address recommendations generated from company process safety management systems
- reviewing the Center for Chemical Process Safety guidance on recognizing catastrophic incident warning signs and developing a program incorporating warning signs into the safety management system
- clarifying the lower equipment design pressure of the reactor within operator training systems, written procedures and control system interfaces
- developing a program ensuring the plant's nightly operating instructions don't conflict with its written operating procedures
- strengthening the plant's operator training program
- completing the plant's alarm management efforts and

implementing a continual program to meet alarm rate performance targets

- improving the plant's safety management system
- modifying the plant's safe operating limits program to prevent operating under conditions that rely on equipment design factors, and
- acquiring the services of an independent third party to perform a comprehensive assessment of the plant's process safety management systems.

Read this story online

SAFETY NEWS & TRAINING ALERT

Who Got Fined & Why



Blocked exits, no fire extinguishers, missing signs: Millions in fines!

Retailers like Dollar General are an easy target for OSHA inspectors, who keep finding hazards like blocked emergency exits time after time. For smaller businesses in other industry sectors, it's never a bad idea to check that the same kind of fire hazards aren't a problem in their facilities.

What the company did wrong: OSHA checked in on seven Southeast Dollar General locations. The company got written up for 11 willful, 16 repeat and four serious violations for:

- struck-by and blocked exit hazards
- failure to label, mount or make fire extinguishers accessible
- storing boxes in front of electrical panels, increasing the risks of an electrical fire
- lack of emergency exit signs
- exposing workers to electrocution by not keeping unused openings in electrical cabinets closed, and
- not providing handrails on stairs where required.

Result: OSHA fined the retail giant \$2,777,640 just a month after levying more than \$1.6 million in fines at other stores. Since 2017, Dollar General's racked up more than \$12 million total in safety fines.

Inspectors hone in on manufacturer's confined space safety oversights: \$192K in fines

Confined spaces are among the most dangerous work areas across industry sectors. One of the most common mistakes companies make is not recognizing or appreciating the need for safety measures in confined spaces in the first place.

What the company did wrong: Two Rivers Terminal formulates products for agricultural fertilizer, airports, pulp and paper and water treatment at plants in Moses Lake, Pasco and Umatilla, Oregon. Employees routinely entered rail car hoppers to break up and dislodge ammonium nitrate without appropriate PPE such as vests, lifelines and respirators. Workers also walked on top of rail cars and sulfur trucks without fall protection.

Result: The Washington State Department of Labor & Industries levied \$192,620 in fines for 46 serious violations related to confined space requirements, PPE enforcement, lockout/tagout, fall protection and safety training. The company's appealing the fines.

Who Got Fined & Why



Concrete mezzanine collapses and crushes demolition worker's legs

Contractors should've conducted an engineering study and beefed up safety protections before knocking down a shuttered power plant.

What the companies did wrong: NorthStar Contracting Group of Everett, Massachusetts, and the project's Boston-based general contractor, Suffolk Construction, were cited for a lack of demolition and asbestos safeguards for employees. A demolition contractor needed to have his legs amputated after a concrete mezzanine platform at the former Boston Edison power plant in South Boston collapsed during demolition and asbestos abatement operations. Two other workers suffered injuries as well.

Result: OSHA cited NorthStar Contracting \$399,864 for failure to:

- conduct an engineering survey on the mezzanine and framing, and floors and walls, to prevent an unplanned collapse
- assign a competent person to oversee the asbestos containment area and do frequent jobsite inspections
- post the safe weight load limit on the mezzanine floor where demolition and asbestos debris were being stored
- train employees to recognize and avoid collapse, struck-by and crushing hazards
- enforce use of respirators in asbestos containment areas and ensure workers' facial hair didn't interfere with facepiece sealing surfaces or respirators' valve functions
- remove asbestos-containing waste by the end of work shifts, and
- provide OSHA 300 logs to investigators.

Suffolk Construction will pay \$292,116 in fines for not:

- inspecting the asbestos containment area
- ensuring workers wore respirators and that PPE fit properly
- implementing a plan to prevent an unplanned collapse of the mezzanine, and
- posting the safe weight load limit on the mezzanine floor.

Read more Who Got Fined & Why in your Membership Dashboard 🗹

HAZARDS Tragic struck-by fatality shows how ever-evolving worksites constantly present new hazards



SUBTLE ON-THE-JOB CHANGES CAN LEAD TO TRAGEDY



orksites aren't static. Some constantly evolve while others undergo more subtle changes over time. Changes can occur at a moment's notice, suddenly presenting workers with a new hazard to face.

That's why safety professionals have to frequently re-evaluate their safety plans to make sure every old hazard remains covered and every new one gets addressed.

Further, supervisors and employees also need to keep their eyes open to the changes taking place in their work areas so they can stay aware of hazards that may not have been present before.

Failure to keep up with the everevolving worksite, whether it's a construction site or a manufacturing plant, can have fatal consequences.

A May 2021 fatality investigated by the Washington State Fatality Assessment & Control Evaluation (FACE) program serves as a perfect example.

A sudden paint spill

On May 5, 2021, a 60-year-old construction site superintendent with 40 years of experience died when a dump truck ran over him as it was backing up.

The superintendent was in charge of coordinating and directing subcontractors and scheduling dump trucks to haul away construction debris. Tragic struck-by fatality shows how ever-evolving worksites constantly present new hazards

On the day of the incident, two drivers employed by a solid waste recycling company were emptying dumpsters when a 5-gallon bucket of paint fell out and spilled onto the street. The superintendent went over to organize the cleanup. He assigned one of the subcontractors to get sawdust to absorb the paint and told the drivers he was going to direct vehicles away from the spill area.

Superintendent signaled driver to back up

The drivers got back into their trucks to go pick up the next dumpster, which was located close to the spilled paint. Their trucks had to be parked side-by-side for the grapple of one truck to pick up the dumpster and empty it into the other truck.

One driver drove out through an alley, turned right and parked on the side of the street near the superintendent. The second driver turned left onto the street, drove forward and stopped. He checked his mirrors and got a hand signal from the superintendent to begin backing up. As the driver backed up, he lost sight of the superintendent and ran him over.

No one witnessed the incident. It's unknown why the superintendent was in the backing zone or why the driver couldn't see him.

FACE investigators found that:

- the truck didn't have a backup camera
- no observer was used to signal if it was safe to back up
- the truck's backup alarm was working as it backed up, and
- the truck drivers weren't trained on procedures for backing up at construction sites.

'Continually assess' worksites for hazards

The FACE report mentions that:

- before backing a dump truck, the driver must determine that no one is currently in the backing zone, and
- it's the responsibility of management to "establish, supervise and enforce training programs ... to improve the skill and competency of all employees in the field of occupational safety and health."

While those are definitely important reminders, the report also recommends employers "continuously assess the hazards of vehicles to workers on foot and ensure hazards are corrected."

And that's really the key takeaway – the importance of continuously assessing the worksite for hazards, whether you're a safety professional, a supervisor or a worker.

On the day of the tragic incident, the superintendent's worksite evolved as he was carrying out his job duties. The paint can fell out, causing an unexpected mess and setting things in motion for the fatality to occur.

If the superintendent would have taken a moment to re-evaluate the worksite around him, take in the potential hazards and plan a way to deal with them, he may have avoided tragedy.

Use training, PPE, other controls to fill in the gaps

Of course, in an ideal world everyone would always keep their wits about them and no one would be distracted by production quotas, project deadlines or family issues. That's where training, PPE and other kinds of controls come into play.

In that regard, the FACE report mentioned employers who use dump trucks should:

- require workers to wear high-visibility garments when exposed to vehicular traffic
- consider installing pedestrian proximity detection systems on trucks
- train drivers to use signalers or backup cameras when backing near workers on foot, and
- create policies requiring drivers to maintain visual contact with workers on foot and requiring workers on foot to stay out of vehicle backing zones unless they're trained and acting as a signaler who is actively signaling the driver.

Controls such as these are needed to help protect workers in those moments when they do fail to notice new, or even pre-existing, hazards that crop up as the worksite evolves around them.

Read this story online 🗹

Real Life Safety

Why did supervisor order staffer to stay in 114 degree workspace?

"You've got to be kidding me," said engineer Sam Kearns. "The air-conditioning is #@\$%^* broke!"

Kearns was early as usual to start an eight-hour shift on a very hot day for a transportation company. He checked the temperature in his workspace with a handheld thermometer.

"114 degrees," Kearns sighed. "I've heard of other employees passing out from lower temperatures than that."

Kearns put out calls to the maintenance department and his supervisor. The maintenance techs came out quick knowing Kearns' shift started soon. They worked on the A/C system for about 10 minutes.

"No good, she's dead," said one of the techs.

"I just got a text from the office," said one of the other techs. "Someone reported the A/C was out of commission about six weeks ago but we never got a work order about it."

"So other engineers just put up with the stifling heat in there and didn't complain," Sam grumbled.

Sam's supervisor, Kim Kavanaugh, came walking up quickly.

"Can the A/C be fixed soon?" she asked.

"Nope," said Sam. "It's dead. I just checked the temperature in the cab. 114 degrees." "Whoa," said Kim. "I don't believe this."

Threat of being fired hung heavy in hot, stale air

"Now listen, I'm not as young or in shape as I used to be," said Sam. "I'm liable to pass out trying to stand that level of heat for eight hours!"

"I hear you," said Kim. "I wish it wasn't like this."

Sam shook his head, mouth agape for a few seconds. "Wish it wasn't like what?"

"I don't like the policy, but the show's got to go on," said Kim. "You've got to start your shift. "The other option isn't doable," said Kim.

"What do you mean?" asked Sam.

"I mean, you'll probably lose your job if you refuse to work," said Kim. "It's considered insubordination. That's the way it works around here."

"But you're telling me to put my health at risk! That's not right," Sam bellowed.

"I know, I know," said Kim. "It's your choice."

Sam steamed for a few seconds before giving in. He couldn't afford to lose his job.

"Fine!" He started his shift working in dangerous heat despite his heavy reservations.

Worker would've been better off walking off the job

Sam didn't last long working in the hellish heat. He passed out about 45 minutes after starting.

Eyewitnesses saw him slump over from his standing position and smack his head on hard metal. He was diagnosed with head and neck injuries requiring surgeries and long-term physical therapy.

Sam's injury led to permanent career-ending disabilities. He sued his employer for failing to provide a safe workplace and sought significant damages.

Result: A court ruled several of the worker's claims could move forward due to the supervisor threatening the worker could be fired for not working. Also: Company records showed other employees had passed out from heat exhaustion due to malfunctioning A/C systems so the employer couldn't argue it didn't know Sam was knowingly placed in a dangerous situation.

The company's liable to pay out a hefty settlement rather than appeal.

(Based on Lupia v. New Jersey Transit Rail Operations)

Read more Real Life Safety in your Membership Dashboard



Training Tips



Can't avoid a long shift? 3 ways to lower the risk of fatigue-related injuries

Fact: Long shifts between 10 and 12 hours increases the risk of injuries.

Also a fact: Often it can't be avoided. Critical work needs doing and there are only so many qualified workers who can do it.

To help reduce fatigue, follow these three best practices:

- If a long shift is required, eliminate overtime. Those extra few hours can lead to an accident.
- Schedule the easiest jobs at the end of the shift to reduce risk of injuries or accidents.
- Allow for power naps. A brief 20-minute nap or resting period can make a world of difference for workers who are pushing themselves.

Grab their attention with a safety prize no one wants to win

Gift cards and other awards work just fine as positive safety incentives that employees like to win. But you can get people's attention by emphasizing the negatives also!

For example: Set up a display with a wheelchair, crutches and a neck brace. Then put a sign in front of the display that says "Win me!"

Tell workers: If they ignore safety rules, they could end up winning one of these painful "prizes."

2 questions to ask when using hand tools

Hand tools can lead to very painful, even debilitating, injuries.

You can curb the danger by asking:

- Is it the right tool for the worker? Make sure the tool is the right size for the worker. If the tool is too big or small, it can cause discomfort.
- Is it the right tool for the space? Make sure employees use hand tools that fit the job and space they're working in. Example: Using a long-handled tool in an enclosed space can lead to bad posture and someone getting hurt.

Read more Training Tips in your Membership Dashboard

about SafetyAlert

Afety News & Training Alert, part of the SuccessFuel Network, provides the latest Safety and employment law news for Safety professionals in the trenches of small-to-medium-sized businesses.

Rather than simply regurgitating the day's headlines, Safety News Alert delivers actionable insights, helping Safety execs understand what Safety trends mean to their business.

But we don't stop there.

Our editors read and vet hundreds of sources and handselect the most relevant, practical content. Then we add our seasoned perspective and deliver actionable insights to help you understand what today's trends mean for your business.

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