Background

Currently, Part 62 allows die changes through either the front or rear gate of a horizontal injection molding machine as long as the machine has a functional mechanical safety plus two independent interlocks on the operator’s gate (or rear barrier, if that is being used) and an emergency or other stop which shuts off the motor or motors which activate the clamping mechanism. The alternate procedure requires that the person changing the mold activate the emergency or other stop and lock the operator’s gate (or rear barrier) in the open position. It also mandates that the employer ensure that the interlocks are checked and found to be functional and properly adjusted before beginning the mold change.

The Advisory Committee for the General Industry Safety Standard Part 62 Plastic Molding approved changes to the existing Part 62 Plastic Molding Safety Standard R408.16234. These changes added a new Rule 6234 (10) and modified the current Rule 6234(10) to become Rule 6234(11) (a) and (b). All companies using horizontal plastic injection molding machines must comply with the new requirements of Rule 6234(10) by January 01, 2017.

Rule Changes

- The new R408.16234 (10) reads as follows: Mold changes on horizontal plastic injection molding machines may continue to be conducted using the procedures specified in sub rule (11) through December 31, 2016. Effective January 01, 2017, employers engaged in mold changes on horizontal injection molding machines shall comply with the General Industry Safety Standard Part 85 “The Control of Hazardous Energy Sources” (Lockout/Tagout) (OSHA 1910.147) as referenced in R408.16227 (2).

Complying with the Rule Changes

- Michigan businesses currently using horizontal injection molding machines must phase out procedures that currently allow for either the front or rear gates of the horizontal injection molding machines to be locked in the open position during die changes by December 31, 2016.
- Beginning January of 2017, it is required that employers follow also the new rule requirements of Part 62 Plastic Molding in order to reduce hazards and eliminate possible accidents during die changes.

Resources and Recommendations

- While compliance with voluntary consensus standards for safety requirements for horizontal injection molding machines are not enforceable by MIOSHA, they can be used as guidance to reduce safety risks.
- MIOSHA recognizes that older, pre-2000 model injection molding machines in use today along with some newly purchased machines may not be able to follow the current Part 85 Lockout standard without shutting down the heat system of the machines that controls the plastics’ temperatures.
- It is recommended that Michigan businesses who currently use horizontal injection molding machines and that may meet the above mentioned information, establish and utilize new die change procedures,
and provide new training and instructional procedures for these horizontal injection mold machines. This will ensure that the full requirements of Part 85 Control of Hazardous Energy Sources Safety Standard is being used and understood by all employee operators and responsible die setting personnel.

**MIOSHA Enforcement Policy**

On December 31, 2016 the alternate mold change procedures [R408.16234(11)] for horizontal plastic injection molding machines in Michigan will expire. Effective January 1, 2017 the MIOSHA General Industry Safety and Health Division will begin enforcing the existing lockout provisions of Part 85 Control of Hazardous Energy Sources safety standard for all horizontal injection mold machine die changes.

**Consultation & Compliance Resources & Assistance**

MIOSHA’s Consultation Education and Training (CET) Division offers statewide safety and health assistance to employers and employees. To learn more about free services available from CET, or to request a visit, call 517-284-7720 or 800-866-4674, or submit your request electronically at [www.michigan.gov/cetrca](http://www.michigan.gov/cetrca). For MIOSHA seminars and other training opportunities, visit [www.michigan.gov/mioshatraining](http://www.michigan.gov/mioshatraining). Additional Lockout/Tagout ([http://www.michigan.gov/lara/0,4601,7-154-11407_30453-93831--,00.html](http://www.michigan.gov/lara/0,4601,7-154-11407_30453-93831--,00.html)) resources are also available on the MIOSHA website at [www.michigan.gov/miosha](http://www.michigan.gov/miosha).