



Fire Prevention Plan

A. Plan Management

The Fire Prevention Plan is designed to ensure that all reasonable steps are taken to preserve life and property from exposure to fire hazards. This plan contains the basic elements of our fire prevention program, which is part of every employee's daily responsibilities. Nanogate/Techniplas expects each employee to safeguard their building from damage by fire by keeping his/her work area clean and free of trash and spills by observing all rules regarding fire prevention.

Procedures are established for reporting and investigating fire and other incidents. Any fire, no matter how small, and/or any discharge of a fire extinguisher, must be reported on an Accident/Incident Form completed by the supervisor and sent through the regular reporting system. The EHS Department and Plant Manager may schedule an investigation, review, and or equipment inspection, if needed. The EHS Department is responsible for insuring that emergency equipment is recharged or replaced, as required.

Selected job titles will be trained on the use of fire extinguishers. Supervisors must instruct each new employee as to the location of the fire exits near their work station, as well as the procedures for an Evacuation Drill. In case of fire, employees should proceed to the nearest exit or alternate route. Do not shout or say anything that might lead to panic among fellow employees or visitors. The building can be evacuated quickly and safely if everyone keeps calm.

Fire drills are held at least once a year to assure the prompt and safe exit of employees and visitors from the building in case of an actual fire. Prompt compliance with the instructions is required during these drills.

B. List of Major Fire Hazards (Fuels)

1. Fuel gases - acetylene, propane, natural gas, most aerosols.
2. Flammable paints, thinners, reducers and solvents.
3. Combustible paints and related products.
4. Oil and/or solvent soaked rags.
5. Paper, cardboard and miscellaneous combustible trash.
6. Oils, fluids, lubricants.

C. Potential Ignition Sources, include but are not limited to:

1. *Open flames* such as welding/cutting operations, pilot lights, oven burners, smoking, cigarette lighters, fires, over-head heaters;
2. *Electric motors* including those used to power ventilation fans, process equipment, air compressors, power tools, vending machines;
3. *Other spark* producing equipment/activities, including arc welding, grinding, static electricity,

plugging in electrical equipment which is already "switched-on", power tools, electrical appliances, dropping tools on concrete floor, shoe/boot nails scraping concrete floor;

4. *Overheated electrical equipment*, motors, electrical panels, and other electrical devices;
5. *Hot engine parts*, such as exhaust manifolds, exhaust systems, and mufflers on lift trucks, and other vehicles.

D. Housekeeping, Maintenance and Storage to Prevent Fires

1. Smoking is a danger to employee health and physical safety, as well as a fire hazard. Fire and explosions can cause serious hardship when facilities and products have to be replaced. Smoking is prohibited inside any plant area and is only permitted in designated smoking areas.
2. Flammable gases, compressed gases, flammable/combustible liquids and aerosols must be properly stored in designated areas and containers, with lids or caps securely in place. All such products must be stored away from sources of ignition, heat, or open flame. Bulk tanks, pails and drums must be secure and sealed shut at all times. Flammable liquids may be dispensed from shipping containers only into approved-type safety cans.

Flammable or oxidizing compressed gas cylinders must be segregated, secured in-place to prevent tipping, and stored with valve caps firmly installed.

Care must be exercised in the handling of flammable and combustible liquids. Extreme caution should be taken to see that such materials are not spilled or splashed, particularly on hot parts or clothing. Flammable and combustible liquids must only be kept in properly labeled diked bulk tanks, under five gallons in approved-type safety containers and/or cabinets which are provided for that purpose.

3. Oil and solvent-soaked rags must be placed in properly labeled non-combustible receptacles that are closed when not in use.
4. Combustible material such as paper, cardboard, old boxes, and oil or solvent soaked rags must never be placed near heat producing devices such as furnaces, ovens, air compressors, hot process machines or water heaters. All trash and other materials of no value must be immediately placed in the metal receptacles provided. Cigarette butts may not be discarded into trash receptacles.
5. All free liquids must be absorbed using the appropriate material and carefully shoveled with non-sparking implements or otherwise placed into appropriate waste accumulation drums.
6. Leaking bulk storage tanks or material transfer piping/ pumps must be reported to the Plant Manager immediately for the initiation of prompt repair. Serious leaks must be temporarily minimized by up-righting drums, closing valves, de-pressurizing systems, or placement and periodic replacement of absorbent materials, until repairs can be affected. Quick repair putty can be located in every small and large spill kit.
7. Faulty electrical equipment, motors, ventilation fans, air compressors, boilers, furnaces, water heaters, emergency lighting systems, exit signs, and material transfer piping/pumps must be

reported to your Supervisor, Plant Manager or Plant Maintenance immediately, for the initiation of prompt repair.

8. Monthly inspections of all fire extinguishers are performed by the EHS Department.
9. All fire protection devices, including but not limited to extinguishers, sprinkler systems, and fire alarms must be serviced and maintained by a competent, licensed, and insured contracting firm on an annual or more frequent basis as needed. Records indicating services performed, technician's signature, date and further service recommendations, must be maintained for periodic inspection by the EHS Department (fire extinguishers) or Maintenance Department (sprinkler systems).
10. All heat-producing equipment including but not limited to ovens, air compressors, process equipment and air conditioners, must be serviced and maintained on an annual or more frequent basis as needed. Records indicating services performed, technician's signature, date and further service recommendations, must be maintained for periodic inspection by the Plant Maintenance Department.
11. Machinery, electrical and mechanical, can be a potential fire hazard if they are improperly or carelessly repaired or operated. Only authorized employees may operate or repair machinery or equipment.

E. Private Fire Protection

All Nanogate/Techniplas facilities are equipped with sprinkler systems. A main drain flow test is performed annually on the sprinkler system and the inspector's test valve is opened at least every two years to ensure that the sprinkler system operates properly. These tests are performed by outside contractors.

1. Extinguishing Incipient Fires

Only personnel trained in use of fire extinguishers are allowed to use fire fighting equipment in the facility.

Incipient fires are those that are small and still in beginning stages. Prompt action by trained persons can mitigate these situations. Emergency training will include how to recognize when the fire is beyond the control of one or two people with fire extinguishers. Professional firefighting services would be called at the first indication of any fire growing beyond the incipient stage.

Each facility is equipped with portable fire extinguishers. Extinguishers are mounted on hooks, and identified by proper signage. They must not be used as clothing racks, door stops, for horseplay or other unauthorized purposes. Once extinguishers are discharged, the EHS Department must be notified immediately to initiate prompt recharging and supply a replacement until the unit is returned to service.

Never use water buckets or hoses to fight liquid fuel or electrical fires (gasoline, kerosene, solvent, oil, grease) as the water will only spread the fire. Water may be used for paper or cardboard trash fires.

2. When Not to Fight a Fire

Never fight a fire:

- If the fire is spreading beyond the spot where it started;
- If you can't fight the fire with your back to an escape exit;
- If the fire can block your only escape; and
- If you don't have adequate fire-fighting equipment.

DON'T FIGHT THE FIRE YOURSELF. CALL FOR HELP.

How to Use a Portable Extinguisher - Remember P.A.S.S.

P *Pull* the pin.

A *Aim* the extinguisher nozzle at the base of the flames.

S *Squeeze* the trigger while holding the extinguisher upright.

S *Sweep* the extinguisher from side to side, covering the area of the fire with the extinguishing agent.

REMEMBER:

- Should your path of escape be threatened;
- Should the extinguisher run out of agent;
- Should the extinguisher prove to be ineffective; and
- Should you no longer be able to safely fight the fire.

....THEN LEAVE THE AREA IMMEDIATELY!

4. How to Inspect your Fire Extinguishers

- Know the locations of fire extinguishers in your work area;
- Make sure the class of the extinguisher is safe to use on fires or machinery in the immediate area;
- Check the seal. Has the extinguisher been tampered with or used before?
- Look at the gauge and feel the weight. Is the extinguisher full? Does it need to be recharged?
- Make sure the pin, nozzle and nameplate are intact; and
- Report any missing, empty or damaged fire extinguishers to your Supervisor if you notice any discrepancies.

5. What to do if you catch on Fire

- STOP - where you are
- DROP - to the floor
- ROLL - around on the floor

This will smother the flames, possibly saving your life. Just remember to STOP, DROP and ROLL.

If a co-worker catches on fire, smother the flames by grabbing a blanket or rug and wrapping them up in it. That could save them from serious burns and even death.

F. Information and Training

The EHS Department may be contacted for further information or explanation of employee duties under this plan.

Management will review the plan with each employee at the following times:

- Initially when the plan is developed;
- Whenever the employee's responsibilities or designated actions under the plan change;
- Whenever an employee is assigned to a different location; and
- Whenever the plan is changed.

The EHS Department will review the plan elements during new employee orientation. It is available and accessible on the intranet for employee review at any time.

G. Emergency Contacts

THESE ARE POSTED NEAR ALL PHONES AND ON ALL BULLETIN BOARDS

Mansfield Fire Department	(911 Emergency)	419-755-9814
Mansfield Police Department	(911 Emergency)	419-755-9724
Richland County Sheriff	(911 Emergency)	419-774-5881
Ohio Highway Patrol		419-756-2222
Avita/Richland Mall		419-709-8667
Ohio Health		419-526-8000
Ohio Eye Associates		419-756-8000
Richland County Emergency Management Agency		419-774-5686
Safety Coordinator		419-521-0175
Environmental Health Manager		419-632-4400

Nanogate/Techniplas Fire Prevention Plan

Revision log

12/03/01 - New - Supersedes all previous plans.
05/02/08 - Added cover page and up-dated plan Reviewed and revised.
05/09/08 – Added revision log, up-dated emergency contacts list.
04/17/09 – Annual review of plan. Reviewed and revised.
03/04/10 – Annual review of plan. Reviewed and revised.
07/02/11 – Annual review of plan. Reviewed and revised.
04/12/16 – Plan reviewed and revised. Marijan Grogoza
04/21/22 - Plan reviewed and revised.