This seems like a drastic statement at best, yet if the properties of Polyurea are compared to the existing coatings and systems, it will become apparent that serious changes will be taking place. The higher costs of Polyurea will present certain market barriers until evaluated on the basis of performance and durability. The rapid curing features are a significant selling point, especially where facility shutdown is an issue. In most cases, the finished product can be put in service within an hour of the application.

Analysis of the Polyurea technology points in the direction of replacement of many urethane and epoxy systems. It is expected that within a few years, industries will awaken to the new materials and recognize their superior characteristics.

What is Polyurea?

Polyurea elastomer is a relatively new chemistry, similar to that of polyurethane. Unlike polyurethanes, polyureas do not require a catalyst to accelerate the chemical reaction. What this all means is curing of polyureas is not affected by moisture or temperature!

Polyurea is a high performance, sprayed, plural component elastomer. It provides an extremely tough, monolithic membrane with excellent water and chemical resistance. The seamless membrane cures in seconds and can be handled or walked on in seconds from the time it is sprayed.

In the Mining Industry there are also a multitude of uses for Turbo Liner, Mines require protection from the damaging effects of abrasion, chemical exposure and atmospheric corrosion. Containment conditions such as, Sedimentation Tanks, Neutralization Tanks, Conveyors, Slurry Pipes, Chemical Storage Tanks, Acid Blending Tanks, Storage Tanks. With the strict regulations in the mining industry these days, it is more important now then it has ever been to have the cure before you have a problem. Turbo Liner has that cure our polurea's are ready for the task.

TURBO LINER PRODUCTS INC.

1 WEST CAMERON (MAIN OFFICE)
KELLOGG, ID 83837
OR
1 SOUTH DIVISION (SHOP)
KELLOGG, ID 83837

Phone: 877-67TURBO (8-8726)
Fax: 208-784-0125 (OFFICE)
Fax: 208-786-7506
Email: vinces@turboliner.com
Web: WWW.turboliner.com

TURBO LINER PRODUCTS INC.

SECONDARY CONTAINMENT INFORMATION

FASTER TOUGHER BETTER

Phone: 877-67TURBO (8-8726)

Unlike polyurethane's and epoxies, polyurea is "hydrophobic" and therefore affected very little by damp or cold surfaces. It can be sprayed directly on water or ice and has been sprayed at 40 degrees below zero with minimum effect on its tack free time.

The biggest benefit of using Ployurea is that is has excellent chemical resistance. Chemicals like Gasoline, Jet fuel, Hydraulic fluid, Oils just to name a few. This makes polyurea one of the most versatile coatings available for the petroleum industry and many others. Polyurea was also used on the Alaskan pipeline as a secondary containment coating.

Polyurea has an extreme resistance to abrasion as well, is impervious to standing water, it is an excellent choice for the lining of concrete (Dams and Spillways) steel storage tanks, ponds, troughs of all types as well as many other types of containments. Rarely can a protective coating be installed and used within hours of the application. The extremely fast curing aspect of the polyurea systems forces a close examination of any application that is constrained by time and temperature. Polyurea is 100% solids (zero VOC's), which means that it is environmentally safe. Turbo Liner coatings are high performance elasto-plastic polymers.

They are characterized by high physical properties, outstanding chemical and solvent resistance, usability under wide climatic conditions with outstanding durability. They are composed of isocyanate polymers which are reacted with amine prepolymers to form a polyurea elastomer. Both components are low viscosity fluids which react very quickly to form a tough polymer when mixed and applied using high pressure heated equipment.

Why do a secondary containment lining?

The Code of Federal Regulations (CFR) 40, Protection of the Environment, made it federal law to positively contain hazardous wastes or constituents. The regulations require a secondary means of containing spilled materials, which contain hazardous chemicals (Section 265.190-.193; 40 CFR). Secondary containment's must function effectively for a period of time sufficient to allow proper spill cleanup with out damage to the environment (Section 265.196; 40 CFR).

Polyurea is an excellent choice for a tank liner. It works very well in the wastewater process water industry. Speed of the application and being able to return the tank back into service is another benefit of using polyurea.

What can you do with Polyurea's?

Extend the life of a pitted, rusted tank. Protect against moisture, salts, and most acids and bases. Provide superb abrasion resistance in vibratory feeders, chutes, pipes, mixers, mills, and many other applications.

Reduce friction in chutes, hoppers, pipes, and tanks

Dampen noise in containers and tumblers. Establish enhanced slip and skid resistance. Seal and secure containers, pits and tanks.

Polyurea is the fastest growing coating on the market with a multitude of uses.