



## TAC ENDORSEMENT FOR THE ON-SITE WASTEWATER ACCREDITATION PROGRAM FOR PRECAST CONCRETE SEPTIC TANK MANUFACTURERS

The majority of the septic tanks and pump chambers installed in Michigan are precast concrete. **Recognizing that structurally sound, watertight tanks are a critical component of a properly functioning on-site wastewater system, the Technical Advisory Council for On-site Wastewater Treatment (TAC) endorses the ON-SITE WASTEWATER ACCREDITATION PROGRAM (OWAP) of the National Precast Concrete Association (NPCA).**

OWAP has established standards for plant facilities, production operations and quality control procedures for the precast tank industry. Prior to the creation of these standards, there have been no industry or regulatory standards, specifically for concrete tanks outside of the overall standards NPCA has for precast plants in general. The OWAP program is comparable to other internationally recognized quality control procedures such as ISO 9000/9001. NPCA certification is widely recognized in the engineering community. Nationally, other states are adopting the OWAP certification or equivalent within their state wastewater codes. The Michigan Criteria for Subsurface Sewage Disposal along with most local health department Sanitary Codes reference that septic tanks shall be structurally sound and watertight. Plants that become OWAP certified will now be able to demonstrate that their tanks meet those requirements.

### What is involved in becoming OWAP Certified?

- ✓ In order to receive OWAP accreditation, plants must be **dedicated to manufacturing high quality on-site wastewater products**. Certification requires complete buy-in by the manufacturer and its employees. Each step of the process from raw materials, to plant operation, to delivery, has a check-and-balance. This provides assurance that the product delivered to the site meets expected standards.
- ✓ To become an OWAP accredited plant, the precast concrete production facility must meet a level of excellence defined by NPCA in accordance with **defined industry standards**. OWAP guidelines require procedures and products to be inspected during each phase of manufacturing to ensure compliance with the rigid program requirements. The OWAP inspector spends a full day at the plant closely examining various production aspects to ensure the plant meets or exceeds the requirements published in the **NPCA Quality Control Manual for Precast Concrete Plants**. This manual is available through <http://www.precast.org/owap/index.htm> or call 1-800-366-7731. While this manual contains several specific requirements for on-site wastewater products, such as watertightness and structural integrity, it also covers many critical production factors such as raw materials, management policies, proof of design, concrete mixes, quality control procedures, production practices, storage and handling, and finished product testing.

- ✓ After approval and to maintain the OWAP credential, plants must pass **annual in-plant inspections** that are performed during plant operation. Plant inspections are conducted by an engineer from an independent, nationally accredited firm. Plant accreditation candidates are graded on all critical aspects of plant operation.
- ✓ Accredited plants are required to **keep thorough records** to verify that materials used in the manufacturing process conform to appropriate product specifications. Product drawings, equipment calibration records, aggregate and concrete test records, batching reports, finished product testing results, proof of design documentation and product inspection reports are all required. These documents also serve as management tools and **quality assurance** aids.

### **What does the OWAP program mean to you?**

- ✓ Administered by NPCA, OWAP enables regulators, builders, installation contractors, engineering consultants and homeowners to identify and select high quality precast concrete manufacturers. OWAP accreditation pre-qualifies manufacturers as companies dedicated to a superior workmanship.
- ✓ The TAC recognizes that the on-site wastewater industry has previously not had the resources or tools that would assure a structurally sound, watertight septic tank. Consequently, the oversight, as to whether a structurally sound, watertight septic tank has been provided was left in the hands of the manufacturers themselves. While a few manufacturers have stepped up and taken note of the products they provide, many more have fallen far short of what would be considered “structurally sound and watertight”.
- ✓ Products of an OWAP plant are easily identified as they are marked with the accreditation logo.

### **What is the next step?**

- ✓ Now is the time to **take action**. Various steps must be taken to assure that precast concrete septic tanks meet consumer expectations, Sanitary Codes, and other criteria or standards applied in the administration of an on-site wastewater program.
  - Reach out to your regulatory agencies, local precast manufacturers, engineering consultants and installation contractors. Educate them on your expectations and requirements for septic tanks.
  - Identify the OWAP Accreditation Program as the means for a manufacturer to assure that minimum standards are met.
  - Specify precast products meeting the standards established in OWAP.
  - Adopt and reference OWAP within bid documents, standards, policy, codes, rules, system designs, and permitting.
  - Reject leaking tanks and tanks of poor construction.

**The TAC considers OWAP as an effective and long awaited program leading to the production of structurally sound and watertight septic tanks. Ultimately, programs such as OWAP allow the wastewater industry to meet our collective mission of performance-based products and the protection of public health and the environment.**