



# Foundry Sand Reuse in Louisiana

Best Practices & Regulatory Compliance

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## 3. Key Concepts and Definitions

### What is Foundry Sand?

Foundry sand is a high-quality silica sand used by metal casting facilities to make molds for shaping molten metal into parts. After repeated use, the sand becomes "spent" and needs to be replaced — creating a large volume of by-product material.

### What is Beneficial Reuse?

Beneficial reuse means finding safe, productive ways to repurpose industrial by-products (like foundry sand) instead of throwing them away. It protects the environment, saves natural resources, and cuts disposal costs. In Louisiana, beneficial reuse helps businesses lower expenses and communities build infrastructure more sustainably.

#### Examples of beneficial reuse for foundry sand include:

- Replacing mined sand in concrete or road base

- Using sand as daily cover at landfills
- Mixing into manufactured soils for landscaping

## What is a TCLP Test?

TCLP stands for Toxicity Characteristic Leaching Procedure — a laboratory test required by the U.S. EPA to find out if a waste material might release harmful contaminants into groundwater.

## How a TCLP test works:

- A sample of the material is soaked in a mild acidic solution that simulates rainwater or landfill conditions.
- Scientists measure what chemicals "leach out" of the sample into the fluid.
- If dangerous levels of metals (like lead) or chemicals are found, the material is classified as hazardous waste and must be managed under strict regulations.

If the material passes the TCLP test (meaning contaminants are below federal limits), it can be reused safely under environmental rules.

## Why Should Readers Care About Foundry Sand Reuse?

- Environmental Protection: Reuse reduces waste sent to landfills and conserves natural sand resources, which are expensive and limited.
- Cost Savings: Foundries, cities, and contractors save money by reusing sand instead of buying new materials or paying high disposal fees.
- Public Safety: Proper testing (like TCLP) ensures that reused sand does not threaten drinking water, soil, or the environment.
- Economic Growth: Reuse projects create jobs, strengthen recycling industries, and make local construction and public works projects more affordable.

# 4. Regulatory Guidelines

## Louisiana Department of Environmental Quality (LDEQ) Regulations

The Louisiana Department of Environmental Quality manages beneficial reuse of foundry sand through its solid waste regulatory framework under Louisiana Administrative Code Title 33, Part VII.

Under La. Admin. Code 33:VII:303, certain uncontaminated solid wastes, including earthen materials such as sands, are exempt from permitting requirements when processed or disposed of in an environmentally sound manner.

Foundry sand from iron, steel, and aluminum foundries that meets environmental safety standards may be considered for beneficial reuse applications. Ferrous foundry sands are the primary candidates for reuse due to

lower contaminant levels.

**Approved uses for beneficially reusable foundry sand include:**

- Raw material for construction products (e.g., asphalt, concrete)
- Landfill engineering material (e.g., daily cover, drainage layers)
- Structural fill and subbase (e.g., road building)
- Manufactured soil and landscape applications

**Key regulatory points:**

- Foundry sand must not exhibit hazardous characteristics. TCLP testing is required to document safety.
- Pre-approval considerations apply to silica-based sands from ferrous foundries (iron, steel).
- Non-ferrous foundry sands (brass, bronze) may contain elevated levels of lead and are subject to case-by-case review.
- Beneficial use applications requiring site-specific approvals must be submitted to LDEQ for review and approval.
- Foundry sand used as an ingredient in industrial manufacturing is exempt from solid waste regulations if managed at a recovery facility.

Louisiana does not currently offer a state landfill surcharge exemption specifically for foundry sand daily cover, though landfill regulations under La. Admin. Code 33:VII:711 allow alternative daily cover materials including sand and similar materials.

## **Federal EPA Guidelines**

At the national level, the U.S. EPA encourages the reuse of spent foundry sands from iron, steel, and aluminum foundries. EPA's major documents include:

- Risk Assessment for Spent Foundry Sands in Soil-Related Applications (2014)
- Sustainable Materials Management Program resources.

EPA concluded that silica-based sands from iron, steel, and aluminum foundries can be safely reused in soil blends, construction materials, and road bases.

EPA does not federally regulate beneficial reuse of non-hazardous foundry sands but defers regulatory authority to states like Louisiana.

## **Local Ordinances**

Most cities and parishes in Louisiana defer to Louisiana Department of Environmental Quality's framework regarding foundry sand reuse. Some municipalities may require additional notifications or approvals for larger volume projects, especially for uses near sensitive areas such as wetlands, coastal zones, or water bodies.

However, if a reuse project complies with LDEQ's beneficial use regulations and environmental standards, local additional permitting is typically minimal. Foundries and end-users should coordinate with local parish governments and environmental agencies to ensure compliance with any local land use or zoning requirements independent of state solid waste regulations.

## 5. Reuse Applications and Louisiana Examples

Beneficial reuse of foundry sand in Louisiana takes multiple forms depending on material properties, project goals, and LDEQ approvals. Real-world applications have been proven across industries, especially construction and landfill operations.

### Common Beneficial Reuses

| Reuse Application                       | Description                                                                                                                                     | Louisiana Examples or Status                                                                                                                                                                             |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Road Base &amp; Fill</b>             | Substitute for sand/aggregate in road subbase, embankments, and structural fill. Provides bulk and drainage.                                    | Approved by LDEQ for beneficial reuse under La. Admin. Code 33:VII:303. Used in Louisiana highway and construction projects. Ferrous foundry sand meets specifications for structural fill applications. |
| <b>Cement &amp; Concrete Production</b> | Raw feedstock in Portland cement kilns (replaces virgin silica) or as fine aggregate in concrete and masonry products.                          | Regional cement facilities receive foundry sand from Louisiana and neighboring states. EPA-supported trials demonstrate foundry sand replacing 20% of concrete mix without loss of strength.             |
| <b>Landfill Uses</b>                    | Daily cover (usually sand-soil mix), interim cover, or drainage layer material in liners and leachate systems.                                  | Permitted under La. Admin. Code 33:VII:711. Louisiana landfills accept beneficially usable foundry sand for alternative daily cover and drainage applications.                                           |
| <b>Soil Amendment</b>                   | Blend into topsoil, manufactured soil, or potting media to improve drainage. Typically limited to ferrous/aluminum sands with low contaminants. | Supported by EPA/USDA research (safe at up to 50% sand content). Potential for use in Louisiana landscape restoration and wetland mitigation projects. Requires case-by-case LDEQ approval.              |
| <b>Sandblasting Abrasive</b>            | Dry, granular sand used for surface blasting/cleaning in lieu of mined sand.                                                                    | Permitted under LDEQ regulations if sand is free of lead and appropriately sized. Clean spent core sand from Louisiana foundries may be used for industrial blasting applications.                       |
| <b>Other Uses</b>                       | Manufactured fill, erosion control, and experimental applications.                                                                              | Subject to LDEQ beneficial use determination on case-by-case basis. Foundry sand used as a                                                                                                               |

| Reuse Application | Description | Louisiana Examples or Status                                     |
|-------------------|-------------|------------------------------------------------------------------|
|                   |             | manufacturing ingredient is exempt from solid waste regulations. |

## Louisiana Examples in Action

- **Cement Kiln Reuse:** Regional cement facilities utilize Louisiana-sourced foundry sand to replace virgin silica in Portland cement manufacturing, saving natural resources and reducing emissions.
- **Road Construction Fill:** Foundry sands approved for Louisiana highway projects are used for structural fill and subbase applications in DOT and construction projects.
- **Landfill Daily Cover:** Louisiana landfills accept beneficially usable foundry sand for alternative daily cover under La. Admin. Code 33:VII:711, conserving native soils and reducing operational costs.
- **Soil Amendments:** EPA-supported research demonstrates that foundry sand blended into topsoil improves drainage without increasing metal uptake. Potential applications for Louisiana wetland restoration with LDEQ approval.
- **Sandblasting and Industrial Applications:** Clean spent core sands from Louisiana foundries are diverted for industrial blasting and surface preparation, reducing costs compared to commercial blasting media.

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## 6. Environmental and Technical Considerations

Beneficial reuse of foundry sand requires careful understanding of material composition, contaminant risks, and environmental testing protocols to ensure safe and responsible outcomes.

### Types of Foundry Sands

#### Ferrous Foundry Sands (Iron and Steel Castings):

- Typically high-purity silica sand bonded with clay (green sand) or chemical resins.
- Low in contaminants.
- EPA and LDEQ consider these the safest and most preferred for reuse.

#### Non-Ferrous Foundry Sands (Aluminum, Brass, Bronze Castings):

- Similar base sand but potential contamination from metal alloys.
- Brass/Bronze sands often contain elevated lead, requiring more stringent testing or stabilization before reuse.

### Specialty Sands:

- Some foundries use olivine sands or other media; not covered under EPA's standard risk assessment for reuse.
- May alter soil pH or chemistry.

### Contaminants of Concern

| Contaminant               | Source                             | Notes                                                                                                  |
|---------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Lead (Pb)</b>          | Brass/bronze alloys                | Key concern; must not exceed TCLP leaching limit (5.0 mg/L).                                           |
| <b>Chromium (Cr)</b>      | Stainless steel alloys, pigments   | Usually low and stable in ferrous foundries; not a major issue.                                        |
| <b>Phenols / Cresols</b>  | Phenolic resins (binder breakdown) | Organic compounds typically present in very low concentrations.                                        |
| <b>PAHs</b>               | Burnt sea coal or resin residues   | Detected at very low levels; below environmental risk thresholds.                                      |
| <b>Dust / Free Silica</b> | Physical hazard from dry sand      | Requires dust suppression measures during handling to protect workers.                                 |
| <b>pH / Salinity</b>      | Binders, chemical additives        | Some foundry sands have slightly alkaline pH, generally not problematic unless used directly in soils. |

### Importance of TCLP Testing

The Toxicity Characteristic Leaching Procedure (TCLP) is the industry-standard EPA test to determine whether foundry sand poses a leaching hazard to groundwater.

- Simulates landfill leachate conditions using an acetic acid solution.
- Measures 8 key metals (Lead, Arsenic, Cadmium, Chromium, etc.).
- Passing TCLP = Sand is classified as non-hazardous.
- Ferrous foundry sands in Louisiana typically pass TCLP easily.

#### If foundry sand fails TCLP (e.g., high lead from brass castings):

- It must be managed as hazardous waste, not reused without treatment.

Key for Louisiana Reuse: All sands used in landfill cover, road base, concrete, etc., must pass TCLP and have supporting documentation.

## Environmental Behavior of Foundry Sand

- Heavy metals in ferrous sands are generally immobilized in the sand matrix.
- Organics (e.g., phenols, PAHs) are below actionable risk levels according to EPA risk assessments.
- Field studies show low leachability and no significant uptake into plants when used in soil amendments.

Conclusion: For properly characterized ferrous foundry sands, environmental risks are minimal — supporting broad beneficial reuse.

## 7. Funding, Grants, and Incentives

### State-Level Incentives

#### Beneficial Use Determinations (BUD):

- Administered by Louisiana Department of Environmental Quality.
- Free technical review and regulatory approval for foundry sand beneficial use projects.
- Eliminates regulatory approval costs for qualifying reuse applications.

#### Waste Reduction and Community Grants:

- Keep Louisiana Beautiful Healthy Communities Grants (\$2,500-\$10,000) support waste reduction and recycling projects.
- Minimum 15% cash match or in-kind donation required.
- Foundry sand reuse projects demonstrating waste diversion qualify.

#### Landfill Alternative Daily Cover:

- Louisiana regulations under La. Admin. Code 33:VII:711 permit alternative daily cover materials including sand.
- No state landfill surcharge exemption currently exists for foundry sand daily cover.

### Federal-Level Opportunities

#### EPA Sustainable Materials Management Grants:

- Periodically available grants supporting innovative reuse/recycling projects.
- Can fund pilot projects, outreach campaigns, or infrastructure improvements related to foundry sand.

#### Federal Infrastructure and Recycling Funding (Infrastructure Investment and Jobs Act):

- Some grant programs are open to states and municipalities improving recycling or circular economy initiatives.
- Foundry sand reuse aligns with goals of waste reduction and sustainable construction.

**FHWA / DOT Support:**

- Federal Highway Administration promotes the use of recycled materials (including foundry sand) in road construction.
- Some research grants and technical support available for projects demonstrating new uses of industrial byproducts in infrastructure.

**Federal USDA Rural Development Grants:**

- Solid Waste Management Grants available for rural areas (population under 10,000).
- Funds technical assistance for solid waste management improvements.
- May support foundry sand beneficial reuse program development.
- Eligible applicants: public bodies, nonprofits, academic institutions.

## Local Opportunities

### Local Government Partnerships:

Louisiana parishes and municipalities may offer support for green construction and waste diversion projects through local initiatives.

Example: Parish public works departments may help coordinate foundry sand reuse or provide support if foundry sand is used in local road construction or public infrastructure projects.

### Public-Private Collaborations:

Landfills may waive or reduce tipping fees for beneficially usable foundry sand, creating cost incentives for reuse.

Construction contractors and engineering firms may provide discounted services or in-kind contributions in exchange for access to economical foundry sand material.

Informal partnerships between foundries, end-users, and local government often unlock significant cost savings without requiring formal grant applications.

## Summary Table: Key Funding and Incentive Programs

| Program/Incentive                                  | Type                 | Key Details                                                                                                   | Impact for Foundry Sand Reuse                                                             |
|----------------------------------------------------|----------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <b>Beneficial Use Determinations (BUD)</b>         | Technical Assistance | Free regulatory review and approval by LDEQ for beneficial use applications.                                  | Eliminates regulatory approval costs and provides pathway for project implementation.     |
| <b>Keep Louisiana Beautiful Grants</b>             | Local Grants         | Healthy Communities Grants (\$2,500-\$10,000) for waste reduction projects. Requires 15% cash match.          | Can fund equipment, community outreach, and pilot projects demonstrating waste diversion. |
| <b>USDA Rural Development Solid Waste Grants</b>   | Federal Grants       | Funding for rural areas (population under 10,000) for waste management improvements and technical assistance. | Can support foundry sand reuse program development and infrastructure.                    |
| <b>Alternative Daily Cover</b>                     | Cost Savings         | Louisiana regulations permit sand for alternative daily cover at landfills under La. Admin. Code 33:VII:711.  | Reduces landfill operating costs through use of available foundry sand material.          |
| <b>EPA Sustainable Materials Management Grants</b> | Federal Grants       | Periodic funding for innovative reuse pilots and waste reduction demonstration projects.                      | Can supplement state and local funding for large-scale foundry sand reuse initiatives.    |

## 8. Active Participants in Louisiana

### Foundries (Generators of Spent Sand)

Howell Foundry (West Feliciana Parish, LA)

- Industrial metal casting company specializing in complex steel and ferrous castings.
- Serves pulp & paper, petrochemical, energy, mining, and oil & gas industries.
- Recently invested \$7.4 million in modernization and capacity expansion.
- Generates spent foundry sand as a byproduct of casting operations.

Regional Ferrous and Non-Ferrous Foundries

- Louisiana has ferrous foundries (iron, steel) and non-ferrous foundries (aluminum) generating spent foundry sand. These facilities serve petrochemical, energy, marine, and construction industries along the Mississippi River corridor and Gulf Coast regions.

Specific production volumes and sand diversion programs for individual Louisiana foundries are not widely documented in available public sources.

## End Users (Consumers of Foundry Sand)

### Holcim (Geocycle) Cement Plant (Mason City, IA)

- Major regional consumer receiving approximately 75,000 tons/year of spent foundry sand.
- Incorporates sand as silica feedstock in Portland cement manufacturing.
- Receives foundry sand from regional foundries including Louisiana sources.

### Louisiana Landfills

- Louisiana landfills accept beneficially usable foundry sand for alternative daily cover and intermediate cover applications under La. Admin. Code 33:VII:711.
- Landfill operations have demonstrated safe long-term foundry sand use with no documented groundwater contamination.

### Louisiana Department of Transportation and Development (DOTD)

- Uses foundry sand as economical fill material in road construction and highway infrastructure projects statewide.

### Construction Contractors and Public Works Departments

- Various construction contractors, industrial developers, and parish public works departments utilize foundry sand for structural fill, road subgrades, and culvert bedding applications.

## Supporting Programs and Agencies

### Louisiana Department of Environmental Quality (LDEQ)

- Oversees Beneficial Use Determinations (BUDs) for foundry sand reuse applications.
- Provides regulatory guidance and technical assistance for beneficial use projects under La. Admin. Code Title 33, Part VII.

### Louisiana Department of Transportation and Development (DOTD)

- Promotes use of recycled and recovered materials in highway construction.
- Provides specifications and guidance for foundry sand use in road infrastructure projects.

### American Foundry Society (AFS)

- Provides technical manuals, best practice guides, and case studies for foundry sand recycling.
- AFS members actively promote foundry sand beneficial reuse across the region.

### U.S. EPA Region 6 (Houston, covers Louisiana)

- Oversees environmental compliance and beneficial use programs for Louisiana.
- Contributed to national risk assessment studies on foundry sand reuse in soil-related applications.
- Provides technical guidance for foundry sand beneficial use initiatives.

### Federal Research Institutions

- USDA and university research programs contribute expertise in soil science and environmental assessment relevant to foundry sand applications.

## Key Collaboration Insights

- Foundries generate consistent, quality-tested sand streams that meet Louisiana beneficial use waste classifications.
- Landfills and Regional Cement Plants provide large-volume end-use markets for beneficially usable foundry sand, creating stable demand.
- Construction Contractors and Public Works Departments drive project-specific demand for foundry sand in road construction, infrastructure development, and industrial fill applications.
- LDEQ, DOTD, and Technical Assistance Programs ensure regulatory compliance, provide technical guidance, and support identification of approved reuse applications.
- American Foundry Society and Regional Industrial Networks disseminate success stories, technical standards, and best practices for foundry sand recycling throughout Louisiana and the broader Gulf South region.

The collaborative network between foundries, end-users, regulatory agencies, and industry organizations establishes foundry sand beneficial reuse as a sustainable, economically viable waste management practice in Louisiana

## 9. Success Story Highlights

### Success Story 1: Holcim Geocycle Cement Plant (Mason City, IA)

- Accepts approximately 75,000 tons/year of spent foundry sand from regional foundries.
- Sourced from Iowa, Minnesota, Wisconsin, and Louisiana foundries including regional producers.
- Saves virgin silica mining and significantly reduces environmental impact in cement manufacturing.
- Demonstrates large-scale, sustainable market for Louisiana foundry sand reuse.

### Success Story 2: Louisiana Landfill Operations

- Louisiana landfills utilize beneficially usable foundry sand for alternative daily cover under La. Admin. Code 33:VII:711.
- Foundry sand approved for daily cover reduces landfill operational costs through material substitution.
- Long-term monitoring by EPA and state agencies confirms no groundwater contamination from properly characterized foundry sand.
- Demonstrates environmental safety and cost savings of foundry sand reuse in Louisiana landfill operations.

#### Success Story 3: Geneseo Agricultural Pilot Project (Illinois, Regional Model)

- Illinois Pollution Control Board documented successful agricultural soil amendment project near Geneseo, Illinois.
- Beneficially usable foundry sand improved drainage on wet farmland, reducing planting delays.
- Crops produced healthy yields equivalent to untreated control plots.
- Metal uptake studies confirmed no adverse impacts on plant composition or soil safety.
- Demonstrates potential for Louisiana foundry sand application in drainage improvement and agricultural restoration projects with proper LDEQ approval.

#### Success Story 4: Louisiana Highway Construction

- Louisiana Department of Transportation and Development has incorporated foundry sand in road construction and subbase applications.
- Foundry sand serves as economical substitute for virgin aggregate in structural fill and road embankments.
- Projects demonstrate successful long-term performance and cost savings compared to virgin materials.
- Establishes proven pathway for foundry sand utilization in Louisiana infrastructure development.

## 10. Clear Business Case Summary

#### Why Foundries Should Reuse Sand:

- Save \$30–\$50 per ton vs. landfill disposal costs.
- Avoid environmental liability.
- Improve sustainability reporting for customers and regulators.

#### Why Contractors Should Reuse Sand:

- Get free or discounted sand for construction fill.

- Improve project bids by lowering material costs.

#### **Why Landfills Should Accept Foundry Sand:**

- Secure free cover material.
- Reduce operating costs.
- Increase daily cover efficiency.

## **11. Risk Management Overview**

Beneficial reuse of foundry sand carries significant economic and environmental benefits, but participants must manage risk carefully to ensure compliance and protect their businesses.

### **Best Practices**

- **Testing:** All sand must pass a current TCLP test (recommended updated annually or if process changes).
- **Documentation:** Keep certificates of analysis (CoA), TCLP results, and shipping records for at least five years.
- **Written Agreements:** Always establish written contracts with receiving facilities (landfills, cement plants, contractors) outlining responsibilities and confirming approved uses.
- **Site-Specific Approvals:** For new or unusual uses not covered under Louisiana's beneficially usable waste classifications, seek Louisiana Department of Environmental Quality (LDEQ) Beneficial Use Determination (BUD) under La. Admin. Code 33:VII:303 or documented exemption.
- **Insurance:** Verify liability coverage, and ensure your insurer understands your beneficial reuse activities.

**ARS Support:** ARS can assist participants in setting up compliance systems, testing protocols, and document templates to minimize legal risk.

## **12. Step-by-Step Workflow for Foundries**

### **Simple Process to Start Foundry Sand Reuse:**

- **Test:**
  - Conduct TCLP testing on representative sand samples through an accredited laboratory.
  - Confirm results meet LDEQ non-hazardous thresholds.
- **Document:**

- Save all lab results, including full reports and summary sheets.
- Partner:
- Contact ARS to match your material to a reuse project (landfill, cement, construction).
- Agreement:
- Sign a beneficial reuse agreement or memo of understanding.
- Ship:
- Begin shipping sand as needed.
- Label loads clearly and maintain load-out logs.
- Monitor:
- If your production process changes (e.g., alloy change, new binder), re-test your sand.
- Maintain communication with ARS and receiving partners.

Result: Compliance, savings, and sustainability without added operational headaches.

## 13. Real Cost Savings Example

### Why Reuse Makes Financial Sense:

- Landfill Disposal Costs:
- Disposal fee: ~\$70-\$150/ton
- Landfill surcharge: +\$4.25/ton
- Total = ~\$74.25-\$154.25/ton to landfill
- Beneficial Reuse Costs:
- Transportation only: ~\$10-\$75/ton (varies by distance)

### Savings Calculation:

#### If your foundry produces 1,000 tons/year:

Landfill cost: 1,000 tons x \$49.25 = \$49,250

Reuse transport cost (avg \$15/ton): 1,000 tons x \$15 = \$15,000

Total annual savings = ~\$34,250

Multiply this by 5–10 years and the impact becomes massive.

## 15. General FAQ & Landfill-Specific FAQ

**Q: Is reused foundry sand safe for public use projects like roads or parks?**

A: Yes, provided the sand passes environmental testing (like TCLP), silica-based foundry sand from iron, steel, and aluminum foundries has been proven safe for reuse in infrastructure projects. Louisiana Environmental Protection Agency and U.S. EPA endorse reuse for approved applications like roads, landfill cover, and construction fill under La. Admin. Code Title 33, Part VII.

**Q: How often does foundry sand need to be tested?**

A: Sand must be tested initially to determine waste classification and verify non-hazardous status. After that, testing frequency depends on process consistency. Most foundries re-test annually or if they change raw materials or binder systems.

**Q: Can reused foundry sand be used near homes, gardens, or drinking water supplies?**

A: Applications like road base and landfill cover are common and safe. For use in soils near gardens or homes, additional case-by-case approvals and environmental assurances may be needed (especially for soil amendments). Contact LDEQ for site-specific guidance.

**Q: What happens if a reused sand load fails testing after reuse starts?**

A: If post-use monitoring detects hazards (extremely rare with properly approved sand), remediation or removal would be required. This is why initial proper testing and comprehensive documentation are critical.

**Q: Who is responsible for proving the sand is safe — the foundry or the user?**

A: The foundry (generator) is responsible for testing and certifying that the sand meets regulatory requirements under La. Admin. Code 33:VII:105 and 33:VII:106. The end user must ensure they use the sand only in LDEQ-approved applications.

## Landfill-Specific FAQ

**Q: Does foundry sand affect landfill leachate or groundwater?**

A: No. Studies by EPA, USDA, and state regulatory agencies confirm that properly tested ferrous foundry sand does not contribute hazardous leachate or create groundwater contamination.

**Q: Is foundry sand considered "cover material" for daily cover compliance?**

A: Yes. Louisiana regulations under La. Admin. Code 33:VII:711 approve beneficially usable foundry sand as alternative daily cover (ADC) material for landfill operations.

**Q: Do we need special equipment to handle foundry sand?**

A: No. Standard landfill spreading equipment (dozers, loaders) can handle foundry sand easily without specialized requirements.

**Q: How do we document use to maintain regulatory compliance?**

A: Maintain simple load logs and daily cover documentation. LDEQ can provide guidance on recordkeeping requirements for beneficial use compliance and fee exemptions.

**Q: What if sand chemistry changes?**

A: Periodic re-testing is recommended, especially if the foundry changes alloy or binder systems. Contact LDEQ if chemistry changes significantly to ensure continued compliance with beneficially usable waste classifications.

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