

**Appendix A – Summary of Environmental Permits
and Applicable Regulations**

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Summary of Permits, Standards, and Regulations

TDEC - Air Construction Permit

- A preconstruction permit required for air contaminant sources because of their potential to emit pollutants.
 1. Sources that have potential for total facility emissions greater than 100 tons per year (tpy), and
 2. Other sources with potential total facility emissions greater than 250 tpy or more of the following criteria pollutants: carbon monoxide, particulate matter, NO_x, SO₂, lead, and ozone

TDEC - Title V Permit

- A Title V Operating Permit is required of companies that have operations involving a major air containment source, such as facilities with the potential to emit the following:
 1. 10 tons per year (tpy) of a single hazardous air pollutant (HAP) or
 2. 25 tpy or more of any combination of HAPs or
 3. 100 tpy of any regulated air pollutant

And

 4. Facilities subject to acid rain requirements under Title IV of the *Clean Air Act*
 5. Facilities with lower tpy limits in non-attainment areas

USEPA - New Source Review (NSR)

- Congress established the NSR program as part of the 1977 *Clean Air Act* Amendments and modified it in the 1990 Amendments. NSR is a preconstruction permitting program that serves two important purposes:
 1. Ensures the maintenance of air quality standards or, where there are not air quality standards, it ensures that air quality does not significantly worsen when factories, industrial boilers, and power plants are modified or added. In areas that do not meet the national ambient air quality standards, NSR assures that new emissions do not slow progress toward cleaner air. In areas that meet the standards, especially pristine areas like national parks, NSR assures that new emissions fall within air quality standards.
 2. Ensures that state-of-the-art control technology is installed at new plants or at existing plants that are undergoing a major modification.

USEPA -Prevention of Significant Deterioration (PSD) Regulations

- PSD applies to new major sources or major modifications at existing sources for pollutants where there are the source is located is in attainment or unclassifiable with the NAAQS. It requires the following:
 1. Installation of the “Best Available Control Technology” (an emissions limitation that is a case-by-case decision that considers energy, environmental, and economic impact.)
 2. An air quality analysis, (it demonstrates that new emissions emitted from a new major source or major modification will not cause or contribute to a violation of any applicable NAAQS or PSD increment, the amount of pollution an area is allowed to increase).

3. An additional impacts analysis (assesses the impacts of air, ground, and water pollution on soils, vegetation, and visibility caused by any increase in emissions of any regulated pollutant from the source or modification under review.)
4. Public involvement (one can provide comments on draft NSR permits before the permit is issued)

USEPA - New Source Performance Standards (NSPS)

- NSPS are air emission or industrial water discharge control standards.
 1. For air pollution, NSPS limits SO₂, PM, and NO_x emissions from stationary gas turbines (built after a certain date).
 2. For water pollution, NSPS sets the level of allowable wastewater discharges from new industrial facilities.

Hazardous Air Pollutant (HAP) Regulations

- Regulations limiting HAPs, air pollutants defined by the *Clean Air Act* as being a threat or risk of cancer or other serious adverse health effects.

Tennessee Air Pollution Control Regulations (TAPCR)

- The standards, policies, rules and regulations promulgated by the Tennessee Air Pollution Control Board to attain and maintain ambient air quality standards within the intent and purpose of the *Tennessee Air Quality Act*.

TDEC - Aquatic Resource Alteration Permit (ARAP) / §401 Water Quality Certification

- An ARAP a state permit required for projects that will physically alter surface waters of the state (streams, wetlands, reservoirs, etc.) and a §401 Water Quality Certification is a federal permit. Additionally, a valid ARAP has the appropriate language to be used as a § 401 Certification.

USACE – *Clean Water Act* §404 Permit

- Section 404 of the *Clean Water Act* regulates the discharge of dredged or fill material into the waters of the United States, including special aquatic sites such as wetlands. Under this permit, proposed actions are to avoid wetland impacts, minimize potential impacts on wetlands, and provide compensation for any remaining unavoidable impacts.

TDEC - National Pollutant Discharge Elimination System (NPDES)

- As authorized by the *Clean Water Act*, the NPDES permit program controls water pollution by regulating point sources that discharge pollutants into waters of the Tennessee and is administer by the state. Industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. Since its introduction in 1972, the NPDES permit program is responsible for significant improvements to our Nation's water quality.

TDEC - NPDES Storm Water Construction Permit

- This permit regulates storm water runoff from construction activities because it can have a significant impact on water quality. As storm water flows over a construction site, it can pick up pollutants like sediment, debris, and chemicals and transport these to a nearby storm sewer system or directly to streams, rivers, and lakes.

1. A completed Notice of Intent (NOI) is prepared and includes project plan information.
2. A storm water pollution plan must be developed prior to submitting the NOI.
3. Almost all permittees must conduct quarterly visual examinations of storm water discharges throughout the term of the permit.

Standard Best Management Practices (BMPs)

- BMPs are intended to control environmental impacts by minimizing the amount and length of disturbances to streams and stream life during construction activities.
- Key BMPs include measures to control runoff, sedimentation, and erosion. Also measures to control dust, temporary stream crossings, and creation of vegetated buffer.
- Construction BMPs need to last the periods of time that construction takes place, whether over several months, seasons or years
- Common BMPs include installation of sediment barriers (silt fences, etc.) must be installed before construction of any project that causes soil disturbance, and must be maintained until the area is fully stabilized and vegetation is established.

Integrated Pollution Prevention Plan (IPPP)

- JSF has an IPPP that contains measures to be taken to minimize potential impacts from pollutants.

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