CLAIMS

1. An inlet assembly for a burner, said inlet assembly comprising:

(a) an inlet nozzle defining an inlet aperture coupleable with an inlet conduit providing an effluent gas stream for treatment by said burner;

(b) a non-circular outlet aperture; and

(c) a nozzle bore extending along a longitudinal axis between said inlet aperture and said outlet aperture for conveying said effluent gas stream from said inlet aperture to said outlet aperture for delivery to a combustion chamber of said burner, said nozzle bore having an outlet portion extending to said non-circular outlet aperture, and a transition portion between the inlet aperture and the outlet portion wherein the inlet aperture has a shape different from the shape of the non-circular outlet aperture and the transition portion has a shape matching the shape of the inlet aperture distal from the outlet portion and a shape matching the shape of the non-circular outlet aperture proximate the outlet portion; and

(d) a baffle located at a boundary between the transition portion and said outlet portion, said baffle defining a baffle aperture positioned within said nozzle bore, said baffle aperture having a reduced cross-sectional area compared to that of said outlet portion adjacent said baffle.

2. The inlet assembly of claim 1, wherein a cross-sectional area of said transition portion reduces along said longitudinal axis from towards said outlet portion.

3. The inlet assembly of claim 1, wherein said inlet aperture is circular.

4. The inlet assembly of claim 1, wherein said outlet aperture is elongate.

5. The inlet assembly of claim 1, wherein said outlet aperture is a generally quadrilateral slot.

6. The inlet assembly of claim 1, wherein said outlet aperture is an obround.

7. The inlet assembly of claim 1, wherein said outlet aperture is formed from a plurality of co-located, discrete apertures.

8. The inlet assembly of claim 1, wherein a cross-sectional area of said outlet portion changes along said longitudinal axis from said outlet aperture towards said inlet portion.

9. The inlet assembly of claim 1, wherein said cross-sectional area of said outlet portion reduces along said longitudinal axis from said baffle to said outlet aperture.

10. The inlet assembly of claim 1, wherein a cross-sectional shape of said transition portion transitions along said longitudinal axis from a shape of said inlet aperture to a shape of said baffle aperture.

11. The inlet assembly of claim 1, wherein a shape of said baffle aperture matches that of said outlet portion adjacent said baffle.

12. The inlet assembly of claim 1, wherein said baffle aperture is formed from a plurality of co-located apertures.

13. The inlet assembly of claim 1, wherein said baffle is configured to provide said baffle aperture having a changeable cross-sectional area.

14. The inlet assembly of claim 13, wherein said baffle comprises a shutter operable to provide said changeable cross-sectional area.

15. The inlet assembly of claim 14, wherein said shutter is biased to provide said changeable cross-sectional area which varies in response a velocity of said effluent gas stream.

16. A method, comprising:

(a) providing an inlet assembly for a burner, said inlet assembly comprising an inlet nozzle defining an inlet aperture coupleable with an inlet conduit providing an effluent gas stream for treatment by said burner, a non-circular outlet aperture, a nozzle bore extending along a longitudinal axis between said inlet aperture and said outlet aperture for conveying said effluent gas stream from said inlet aperture to said outlet aperture for delivery to a combustion chamber of said burner and a baffle between said inlet aperture and said outlet aperture, said baffle defining a baffle aperture positioned within said nozzle bore, said nozzle bore having a transition portion between said inlet aperture and an outlet portion extending to said non-circular outlet aperture wherein the inlet aperture has a shape different from the shape of the non-circular outlet aperture and the transition portion has a shape matching the shape of the inlet aperture distal from the outlet portion and a shape matching the shape of the outlet aperture proximate the outlet portion, the baffle is located at the boundary of the transition portion and the outlet portion and said baffle aperture has a reduced cross-sectional area compared to that of said outlet portion adjacent said baffle; and

(b) supplying said effluent stream to said inlet aperture.

17. The method of claim 16, wherein said baffle aperture has a changeable cross-sectional area and said method further comprises:

varying said changeable cross-sectional area in response a velocity of said effluent gas stream.