CLAIMS:

1. A system for fluidizing ash in a duct of a selective catalytic reduction system, comprising:

a source for generating compressed air; and

an air injection header joined with said source and joined with said duct via one or more holes in said duct, wherein said air injection header is adapted to inject compressed air from said source to said duct.

2. A system according to claim 1, wherein said air injection header further comprises a sub-header joined with a plurality of injection lances, each of said plurality of injection lances having an end nozzle.

3. A system according to claim 2, wherein said end nozzle includes one of a mushroom cap, an angled end configuration, a perforated end configuration, or an open end configuration.

4. A system according to claim 2, wherein said end nozzle is adjustable or movable.

5. A system according to claim 1, wherein said air injection header further comprises a manifold including a top surface having a plurality of injection lances for directing a plurality of compressed air injections to areas of said duct prone to dust build-up.

6. A system according to claim 5, further comprising a means for moving said manifold laterally to facilitate the movement of dust in said duct.

7. A system according to claim 6, wherein said means for moving includes a motor or pneumatic cylinder.

8. A system for fluidizing ash in a duct of a selective catalytic reduction system, comprising:

a duct;

means for generating compressed air; and

an air injection header joined with said means for generating compressed air and joined with said duct via one or more holes in said duct, said air injection header including a sub-header joined with a plurality of injection lances, each of said plurality of injection lances having an end nozzle, wherein said air injection header is adapted to inject compressed air from said means for generating compressed air to said duct.

9. A system according to claim 8, wherein said end nozzle includes one of a mushroom cap, an angled end configuration, a perforated end configuration, or an open end configuration.

10. A system according to claim 8, wherein said end nozzle is adjustable or movable.

11. A system according to claim 8, wherein said air injection header further comprises a manifold including a top surface having a plurality of injection lances for directing a plurality of compressed air injections to areas of said duct prone to dust build-up.

12. A system according to claim 11, further comprising a means for moving said manifold laterally to facilitate the movement of dust in said duct.

13. A method for fluidizing ash in a duct of a selective catalytic reduction system, comprising:

generating compressed air; and

injecting said compressed air to said duct via an air injection header and one or more holes in said duct upstream of a catalyst.

14. A method according to claim 13, further comprising a means for moving a manifold of the air injection header laterally to facilitate movement of dust in said duct.

15. A selective catalytic reduction system comprising:

a duct;

a catalyst positioned within said duct; and

means for injecting compressed air into said duct at a position upstream of said catalyst.

16. A selective catalytic reduction system according to claim 15, wherein said means for injecting further comprise:

means for generating compressed air; and

an air injection header joined with said means for generating compressed air and joined with said duct via one or more holes in said duct, said air injection header including a sub-header joined with a plurality of injection lances, each of said plurality of injection lances having an end nozzle, wherein said air injection header is adapted to inject compressed air from said means for generating compressed air to said duct.

17. A selective catalytic reduction system according to claim 16, wherein said end nozzle includes one of a mushroom cap, an angled end configuration, a perforated end configuration, or an open end configuration.

18. A selective catalytic reduction system according to claim 16, wherein said end nozzle is adjustable or movable.

CLAIMS:

1. A system for fluidizing ash in a duct of a selective catalytic reduction system, comprising:

a selective catalytic reduction system including a duct;

a source for generating compressed air; and

a compressed air injection header joined with said source and joined with said duct via one or more holes in said duct upstream of a catalyst, wherein said compressed air injection header injects compressed air from said source to areas of said duct prone to dust build-up thereby re-entraining a dust in said duct in a flue gas flowing through said duct and the catalytic reduction system for removal of the dust from the duct via the flue gas.

2. A system according to claim 1, wherein said compressed air injection header further comprises a sub-header joined with a plurality of injection lances, each of said plurality of injection lances having an end nozzle.

3. A system according to claim 2, wherein said end nozzle includes one of a mushroom cap, an angled end configuration, a perforated end configuration, or an open end configuration.

4. A system according to claim 2, wherein said end nozzle is adjustable or movable.

5. A system according to claim 1, wherein said compressed air injection header further comprises a manifold including a top surface having a plurality of injection lances for directing a plurality of compressed air injections to areas of said duct prone to dust build-up.

6. A system according to claim 5, further comprising a means for moving said manifold laterally to facilitate the movement of dust in said duct.

7. A system according to claim 6, wherein said means for moving includes a motor or pneumatic cylinder.

8. A system for fluidizing ash in a duct of a selective catalytic reduction system, comprising:

a duct;

means for generating compressed air; and

a compressed air injection header joined with said means for generating compressed air and joined with said duct upstream of a catalyst via one or more holes in said duct, said compressed air injection header including a sub-header joined with a plurality of injection lances, each of said plurality of injection lances having an end nozzle, wherein said compressed air injection header injects compressed air from said means for generating compressed air to areas of said duct prone to dust build-up thereby re-entraining a dust in said duct in a flue gas flowing through said duct and the selective catalytic reduction system for removal of the dust from the duct via the flue gas.

9. A system according to claim 8, wherein said end nozzle includes one of a mushroom cap, an angled end configuration, a perforated end configuration, or an open end configuration.

10. A system according to claim 8, wherein said end nozzle is adjustable or movable.

11. A system according to claim 8, wherein said compressed air injection header further comprises a manifold including a top surface having a plurality of injection lances for directing a plurality of compressed air injections to areas of said duct prone to dust build-up.

12. A system according to claim 11, further comprising a means for moving said manifold laterally to facilitate the movement of dust in said duct.

13. A method for fluidizing ash in a duct of a selective catalytic reduction system, comprising:

generating compressed air; and

injecting said compressed air into said duct via an air injection header and one or more holes in said duct upstream of a catalyst.

14. A method according to claim 13, further comprising a means for moving a manifold of the air injection header laterally to facilitate movement of dust in said duct.