a concentration of fluorine (F) in the fluorine-containing stream is less than about 2,500 ppm by volume; and

the fluorine-containing stream comprises F_2 and nitrogen, and is substantially free of oxygen-containing compounds.

37. The method of claim 35 or 36, wherein the spent catalyst comprises:

platinum on a KL-zeolite;

a support matrix comprising alumina, silica, a mixed oxide thereof, or a mixture thereof;

from about 0.025 wt. % to about 5 wt. % chlorine; and

from about 0.025 wt. % to about 5 wt. % fluorine.

38. A reforming process comprising:

(A) contacting a hydrocarbon feed with an aromatization catalyst comprising a transition metal and a catalyst support under reforming conditions in a reactor system to produce an aromatic product;

(B) performing step (A) for a time period sufficient to form a spent aromatization catalyst;

(C) contacting the spent aromatization catalyst with a fluorine-containing stream comprising a fluorine-containing compound to produce a fluorinated spent catalyst;

(D) contacting the fluorinated spent catalyst with a chlorine-containing stream comprising a chlorine-containing compound to produce a fluorinated-chlorinated spent catalyst; and

(E) contacting the fluorinated-chlorinated spent catalyst with a decoking gas stream comprising oxygen.

39. The process of claim 38, wherein the reforming process is an *in situ* process.

40. The process of claim 38, wherein steps (C)-(E) are performed in a vessel external to the reactor system.

a concentration of fluorine (F) in the fluorine-containing stream is less than about 2,500 ppm by volume; and

the fluorine-containing stream comprises F_2 and nitrogen, and is substantially free of oxygen-containing compounds.

37. The method of claim 35 or 36, wherein the spent catalyst comprises:

platinum on a KL-zeolite;

a support matrix comprising alumina, silica, a mixed oxide thereof, or a mixture thereof;

from about 0.025 wt. % to about 5 wt. % chlorine; and

from about 0.025 wt. % to about 5 wt. % fluorine.

38. A reforming process comprising:

(A) contacting a hydrocarbon feed with an aromatization catalyst comprising a transition metal and a catalyst support under reforming conditions in a reactor system to produce an aromatic product;

(B) performing step (A) for a time period sufficient to form a spent aromatization catalyst;

(C) contacting the spent aromatization catalyst with a fluorine-containing stream comprising a fluorine-containing compound to produce a fluorinated spent catalyst;

(D) contacting the fluorinated spent catalyst with a chlorine-containing stream comprising a chlorine-containing compound to produce a fluorinated-chlorinated spent catalyst; and

(E) contacting the fluorinated-chlorinated spent catalyst with a decoking gas stream comprising oxygen.

39. The process of claim 38, wherein the reforming process is an *in situ* process.

40. The process of claim 38, wherein steps (C)-(E) are performed in a vessel external to the reactor system.

41. A reforming process comprising:

(A) contacting a hydrocarbon feed with an aromatization catalyst comprising a transition metal and a catalyst support under reforming conditions in a reactor system to produce an aromatic product;

(B) performing step (A) for a time period sufficient to form a spent aromatization catalyst;

(C) contacting the spent aromatization catalyst with a chlorine-containing stream comprising a chlorine-containing compound to produce a chlorinated spent catalyst;

(D) contacting the chlorinated spent catalyst with a fluorine-containing stream comprising a fluorine-containing compound to produce a chlorinated-fluorinated spent catalyst; and

(E) contacting the chlorinated-fluorinated spent catalyst with a decoking gas stream comprising oxygen;

wherein the spent aromatization catalyst comprises from about 0.1 wt. % to about 10 wt. % transition metal, based on the weight of the spent aromatization catalyst excluding carbon.

42. The process of claim 41, wherein the reforming process is an *in situ* process.

43. The process of claim 41, wherein steps (C)-(E) are performed in a vessel external to the reactor system.