level.

14. A process for producing phenol and cyclohexanone, the process comprising:

(a) contacting benzene and hydrogen in the presence of a hydroalkylation catalyst under hydroalkylation conditions effective to form a first effluent stream comprising cyclohexylbenzene;

(b) contacting at least a portion of the cyclohexylbenzene from the first effluent stream with oxygen in the presence of cyclic imide catalyst to form a second effluent stream comprising cyclohexylbenzene hydroperoxide and unreacted cyclohexylbenzene; and

(c) contacting a feed comprising at least a portion of said cyclohexylbenzene hydroperoxide from (b) and water in an amount ~~up~~ from 1 ppm to 15,000 ppm, based upon total weight of feed, with a cleavage catalyst comprising an aluminosilicate of the FAU type under cleavage conditions effective to convert at least a portion of the cyclohexylbenzene hydroperoxide into phenol and cyclohexanone.

15. The process of claim 14, wherein water is present in said feed in an amount ranging from 100 ppm to 5,000 ppm based upon total weight of feed.

16. The process of claim 14 or claim 15, wherein the feed comprises from 0.5 wt% to 49.5 wt% cyclohexylbenzene hydroperoxide, based upon total weight of the feed.

17. The process of any one of claims 14-16, wherein the feed comprises at least 50 wt% unreacted cyclohexylbenzene, based upon total weight of the feed.

18. The process of any one of claims 14-17, wherein the FAU type zeolite has a unit cell size less than or equal to 24.35 Å.

19. The process of any one of claims 14-18, wherein the FAU type zeolite has a unit cell size less than or equal to 24.30 Å.

20. The process of any one of claims 14-19, wherein the cleavage conditions include a temperature of about 20°C to about 200°C and a pressure of about 100 kPa, gauge to about 2000 kPa, gauge.

21. The process of any one of claims 14-20, wherein the contacting step (c) is conducted in at least one fixed bed reactor.

22. The process of any one of claims 14-21, wherein the contacting step (c) is conducted in at least a first reactor and a second reactor connected in series.

23. The process of any one of claims 14-22, wherein the contacting step (c) is conducted in at least a first reactor and a second reactor connected in parallel.

24. The process of any one of claims 14-23, comprising a cleavage catalyst loading of