~~What is claimed is:~~Claims:

1. An atmosphere control system (74, 74') for use with a container (10), the atmosphere control system comprising:

an air compressor (80) configured to generate compressed air, the air compressor located outside the container;

a separator (90) configured to receive the compressed air and output nitrogen into the interior of the container; and a valve (V1) between the air compressor (80) and the separator (90),characterized in that the valve (V1), in an open position, directs compressed air to the container (10).

2. A refrigeration unit (24) for use with a container (10), the refrigeration unit comprising:

a compressor (26), a condenser (28), an expansion device (30) and an evaporator (32) configured to circulate a refrigerant;

a condenser section (58) housing the compressor and the condenser;

an evaporator section (54) housing the evaporator;and

the~~an~~ atmosphere control system (74, 74') according to claim 1, wherein~~comprising:~~

~~an air compressor configured to generate compressed air;~~

~~a separator configured to receive the compressed air and output nitrogen;~~

the air compressor located in the condenser section; and

the separator located in the evaporator section.

3. The atmosphere control system (74, 74') of claim 1 or the refrigeration unit (24) of claim 2 wherein:

the valve (V1), in a closed position, directs compressed air to the separator (90).

4. The atmosphere control system (74, 74') or the refrigeration unit (24) of claim 3 further comprising:

a controller (70) configured to control the valve (V1) to move between the open position and the closed position.

~~2. The refrigeration unit of claim 1 wherein:~~

~~the atmosphere control system comprises a valve between the air compressor and the separator.~~

~~3. The refrigeration unit of claim 2 wherein:~~

~~the valve, in an open position, directs compressed air to the container.~~

~~4. The refrigeration unit of claim 3 wherein:~~

~~the valve, in a closed position, directs compressed air to the separator.~~

~~5. The refrigeration unit of claim 4 further comprising:~~

~~a controller configured to control the valve to move between the open position and the closed position.~~

5~~6~~. The refrigeration unit (24) of claim 4~~5~~ wherein:

the controller (7) is configured to control the compressor (26).

6. The atmosphere control system (74, 74') of claim 4 or the refrigeration unit (24) of claim 4 or 5 further comprising:

a sensor (96) in the evaporator section (54), the sensor configured to measure a level of a gas in the container (10);

wherein the controller (70) is configured to move the valve (V1) between the open position and the closed position in response to the level of the gas in the container.

7. The atmosphere control system (74, 74') of any of claims 1, 3, 4 or 6, or the refrigeration unit (24) of any claims 2 to 6 wherein:

the atmosphere control system (74, 74') comprises a heat exchanger (84) positioned between the air compressor (80) and the separator (90), the heat exchanger configured to cool the compressed air from the air compressor.

~~7. The refrigeration unit of claim 5 further comprising:~~

~~a sensor in the evaporator section, the sensor configured to measure a level of a gas in the container;~~

~~wherein the controller is configured to move the valve between the open position and the closed position in response to the level of the gas in the container.~~

~~8. The refrigeration unit of claim 1 wherein:~~

~~the atmosphere control system comprises a heat exchanger positioned between the air compressor and the separator, the heat exchanger configured to cool the compressed air from the air compressor.~~

8~~9~~. The refrigeration unit (24) of claim 7~~8~~ wherein:

the atmosphere control system (74, 74') comprises a water separator (86) between the heat exchanger (84) and the separator (90).

~~10~~9. The refrigeration unit (24) of claim ~~9~~ 8 wherein:

the atmosphere control system (74, 74') comprises at least one filter (82) between the water separator (86) and the separator (90).

~~11~~10. The refrigeration unit (24) of claim ~~10~~ 9 wherein:

the at least one filter (82) is located in the condenser section (58).

~~12~~11. The refrigeration unit (24) of claim ~~10~~ 9 wherein:

The at least one filter (82) is located in the evaporator section (54).

~~13. An atmosphere control system for use with a container, the atmosphere control system comprising:~~

~~an air compressor configured to generate compressed air, the air compressor located outside the container;~~

~~a separator configured to receive the compressed air and output nitrogen into the interior of the container.~~

~~14. The atmosphere control system of claim 13 further comprising:~~

~~a valve between the air compressor and the separator.~~

~~15. The atmosphere control system of claim 14 wherein:~~

~~the valve, in an open position, directs compressed air to the container.~~

~~16. The atmosphere control system of claim 15 wherein:~~

~~the valve, in a closed position, directs compressed air to the separator.~~

~~17. The atmosphere control system of claim 16 further comprising:~~

~~a controller configured to control the valve to move between the open position and the closed position.~~

~~18. The atmosphere control system of claim 17 further comprising:~~

~~a sensor in the evaporator section, the sensor configured to measure a level of a gas in the container;~~

~~wherein the controller is configured to move the valve between the open position and the closed position in response to the level of the gas in the container.~~

~~19. The atmosphere control system of claim 13 further comprising:~~

~~a heat exchanger positioned between the air compressor and the separator, the heat exchanger configured to cool the compressed air from the air compressor.~~

~~20. The atmosphere control system of claim 19 further comprising:~~

~~the atmosphere control system comprises a water separator between the heat exchanger and the separator.~~

~~21. The atmosphere control system of claim 20 further comprising:~~

~~at least one filter between the water separator and the separator.~~